



U. S. NAVAL SUBMARINE MEDICAL CENTER

Submarine Base, Groton, Conn.

REPORT NUMBER 674

**PROVISIONAL MEDICAL STATISTICS FOR PERSONNEL ATTACHED
TO NUCLEAR POWERED SUBMARINES: FY 66-69**

by

Ruport Hester, Ph.D.

**Bureau of Medicine and Surgery, Navy Department
Research Work Unit M4306.01-4020BFBK9.02**

Approved and Released by:

**J. E. Stark, CAPT MC USN
COMMANDING OFFICER
Naval Submarine Medical Center**

27 July 1971



ERRATUM

NAVSUBMEDRSCHLAB REPORT 674:

Page 1, Column 2, six lines from the bottom of the page:

the first word in the line should be injuries

Please make this correction in your copy.

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SUBMARINE MEDICAL RESEARCH LABORATORY

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SUMMARY PAGE

PURPOSE

The aim of this paper is to examine the implications of morbidity and mortality experiences among personnel attached to nuclear powered submarines toward evaluating the effects of prolonged exposure to the nuclear powered submarine environment upon crew health.

FINDINGS

Morbidity and mortality data for personnel attached to nuclear powered submarines compiled within the Navy Bureau of Medicine and Surgery Inpatient Data System for fiscal years 1966-1969 are summarized. Comparison between these data and currently available Navy and Marine Corps medical statistics yields essentially negative findings.

APPLICATION

Basically this is an interim report. It provides a realistic basis for planning for vigorous inquiry pertaining to the effect of prolonged exposure to the nuclear submarine environment upon the health of naval personnel. The statistical summaries reported herein, also can serve as a cross-check upon the consistency of dates obtained in a more complex longitudinal experimental design utilizing individual medical records as primary data.

ADMINISTRATIVE INFORMATION

This investigation was conducted as a part of Bureau of Medicine and Surgery Research Work Unit M4306.01-4020BFBK9 — Longitudinal Health Study of Personnel Exposed to Submarine Environment and Diving Hazards for Extended Periods. The present report is No. 2 on this Work Unit. It was approved for publication on 27 July 1971 and designated as NavSubMedRschLab Report No. 674.

PUBLISHED BY THE NAVAL SUBMARINE MEDICAL CENTER

ABSTRACT

A statistical summary of admissions to the sick list and deaths among personnel attached to nuclear powered submarines during fiscal years 1966-1969 inclusive is reported. Data were obtained by search of Navy Bureau of Medicine and Surgery ADP tape files; and in view of the file search procedure certain admissions to the sick list, notably admissions to non-naval medical facilities, are missing. Compared to Navy and Marine Corps service-wide experience for corresponding years the hospitalization rates for the submariners were very low; and in general preliminary findings were negative. Possible implications of these data with respect to prolonged exposure to the nuclear powered submarine environment upon crew health are explored.

PROVISIONAL MEDICAL STATISTICS FOR PERSONNEL ATTACHED TO NUCLEAR POWERED SUBMARINES: FY 66-69

INTRODUCTION

Possible effects of prolonged exposure to the nuclear submarine environment upon the health of naval personnel is a topic of continuing interest at the Naval Submarine Medical Research Laboratory. Pursuant to this interest data pertaining to mortality and morbidity among submariners assigned to the nuclear fleet have been obtained from the Naval Medical Data Service Center. These data, covering years of medical experience, could be retrieved quickly by computer search of magnetic tape files. Epidemiological trends these data might disclose would be of obvious value in planning detailed investigation.

Preliminary findings have been essentially negative. There is, in fact, little reason to doubt that submariners in the nuclear Navy are an exceptionally healthy group. At the same time it is keenly recognized that this initial evaluation fails to come to terms with the stated goals of the basic inquiry. While the loopholes are several, two predominate. First, we are not able to relate the incidence of disease to length of exposure to the submarine environment. Secondly, we have not been able to trace personnel after detachment from their submarines for possible exposure related sequelae. Because of these limitations, both due to the file search procedure used, the meaning of negative findings is essentially ambiguous.

The foregoing and related methodological problems can be presented most conveniently after preliminary results are reported. Accordingly, they will be examined in detail in later discussion.

BACKGROUND

In his submarine qualification thesis Austin¹ presented an account of medical experiences on the first seventy Polaris patrols. This work, however, has a security classification and is not readily available. More recently Wilken has reported significant medical experiences aboard Polaris submarines for 360 patrols during the period 1963-1967. The latter report is readily available. Since the Wilken report is based upon the medical sections of SSBN patrol reports, a source technically independent from the data presented below, within broad limits his findings can serve as a crosscheck upon the material to follow.

The Wilken data were primarily limited to those experiences occurring at sea in the unique environment of a submerged Polaris submarine; whereas statistical summaries to follow are based upon all reported diseases and inquiries among personnel attached to all classes of nuclear-powered submarines, subsuming both at-sea and off-patrol experiences. Submarines, of course, spend only part of each year on patrol. Polaris submariners, which

numerically dominate our population at risk, in part, spend only about one third of their time at sea. Absolute agreement between these summaries and the Wilken report, therefore, should not be expected.

Contrast between the picture emerging from the two information sources, however, far exceeds anything predictable from the time-base difference. Although in a general sense the data below support the conclusion by Wilken that "the general health of the Polaris Navy must be considered outstanding" (reference 7, page 1); it is equally apparent that reported off-patrol morbidity rates far exceed at-sea experiences. The contrast obtains, notwithstanding some evidence that the data to follow are yet incomplete, and after the possible contribution of motor vehicle injuries to off-patrol morbidity experience have been discounted. It should be added that the contrast points up one of the perplexities inherent to our inquiry: continuous selection of healthy personnel for fleet service diminishes the likelihood that submarine crews will show excessive morbidity, whatever the actual effects of the submarine ambience.

METHOD

The morbidity and mortality data obtained from the Naval Medical Data Service Center were compiled pursuant to applicable instructions for the Navy Bureau of Medicine and Surgery Inpatient Data System. Sick-list admission and death record files were searched for cases having nuclear submarines designated as duty stations. The data

obtained covered the period from 1961 through fiscal year 1969.

Since procedures and coding instructions for the Inpatient Data System were revised from time to time over the decade tabulating comparable reports for the entire period would have involved technical problems of some magnitude. For this reason, tables to follow are limited to experiences for FY 66 - FY 69, a period covering a major portion of the reported medical experience and a period during which data were compiled pursuant to the same directive (BUMEDINST 6310.8).

Morbidity among personnel attached to Nuclear submarines reported for each of the four years is summarized in Table I of Appendix A. Diagnostic classification is by Section/Group of the Department of Defense Disease and Injury Code (NAVMED P-5082).

Two properties of the table should be noted. First, there were no restrictions on the number of diagnoses a patient might receive during an admission to the sick-list. As a rule, when multiple diagnoses were reported for a given admission the coded information gave few clues as to the contribution of each to the overall clinical picture. Therefore, quite arbitrarily, in compiling the table the admission and all sick-days incurred therein were attributed to the first diagnosis indicated, presumed to be the admission diagnosis. Separate columns in the table distinguish both admission counts and sick-days incurred involving a sole diagnosis from those possibly complicated by additional diagnoses. There is, evidently, no assurance that sick-days tabulated for an

admission diagnosis "complicated" by other diagnoses are correctly assigned. In many contexts the detailed breakdown is of little consequence; but in certain instances it points up the possibility of serious misinterpretation. For an example note that for FY-67 eight admissions incurring a total of 686 sick-days are attributed to tuberculosis of the respiratory system. Of the eight admissions, however, the picture is complicated by other diagnoses in three cases accounting for a total of 624 sick-days. Thus, the table indicates that for FY-67 somewhere between 72 and 696 sick-days were incurred for respiratory tuberculosis.

Secondly, no attempt was made to distinguish first admissions from re-admissions nor to distinguish initial admissions from transfer admissions. Within limits both distinctions would have been possible, but inspection of the data indicated that the additional detail would have added little usable information.

Since some of the diagnostic groups in Table I (Appendix A) are rather broad, additional detail for selected diagnostic categories are given in Table II of the Appendix. Any specific diagnosis for which personnel attached to the nuclear-powered submarines incurred 100 or more sick-days in any one of the four fiscal years appears in the second table. Certain others and less precisely defined diagnostic classifications appears in this table, each for a reason to be indicated in appended notes.

RESULTS

I. COMPARATIVE STATISTICS

A. Estimated Populations At Risk.

Rather than seek data pertaining to man years at risk from the Bureau of Naval Personnel at this stage crude estimates were constructed by the following method. First, the average strength of the commissioned nuclear submarine fleet for each of the four years was evaluated. A submarine commissioned before the start of a given year was taken to be active for the entire year, the exception being the Scorpion (SSN 589), lost in June 1968, and taken to be active 0.88 years for FY-68 and none of FY-69. A submarine commissioned during a given fiscal year was taken to be active for a fractional part of the year defined by the data of commissioning. Secondly, a crew of 100 officers and men was assumed for each SSN; while two crews, each consisting of 132 officers and men, were assumed for each SSBN.

From the foregoing evaluation and assumption the estimated average force strength of personnel assigned to nuclear submarines for each of the four years was estimated (Table I). We may be reasonably sure that the actual population at risk exceeded the estimates indicated, in part because SSN crews frequently exceed 100 and in part because crews are assigned to submarines and, therefore, can contribute to reported medical experience well in advance of actual commissioning. There

**Table I. Commissioned Nuclear-Powered Submarine Force Strength and
Estimated Personnel Force Strength Based Upon Officer
and Enlistee Allowances: Fiscal Years 1966-1969**

FORCE STRENGTH					
		FY 66	FY 67	FY 68	FY 69
NUCLEAR-POWERED	SSN	23.24	26.73	31.02	36.23
SUBMARINES	SSBN	32.26	39.21	41.00	41.00
PERSONNEL	SSN	100	100	100	100
ALLOWANCE	SSBN	264	264	264	264
ESTIMATED	SSN	2324	2673	3102	3623
PERSONNEL FORCE	SSBN	8517	10351	10824	10824
STRENGTH	TOTAL	10841	13024	13926	14447

is, however, no simple alternative to the method indicated for estimating the submarine personnel strength. Presuming the computed estimates to be small, the practical consequence will be to inflate the estimated morbidity among the submariners; and this is of no concern so long as the estimated rates remain low.

B. Hospitalization Rate.

Estimated hospitalization rates for submariners in the nuclear fleet, based upon the estimated force strength (Table I) and reported total sick days

(Table I, Appendix A), appear in Table II below. Hospitalization rate is defined simply as total sick days per 100 men in the population at risk per year.

For crude comparison hospitalization rates for the entire Navy and Marine Corps for each of the four years are quoted in Table II from Statistics of Navy Medicine. The service-wide rates, for reasons unknown to the writer, exclude admission of Navy station hospitals but include Naval and Marine Corps personnel treated in non-naval medical facilities. Rates for the submariners, on the other hand are

Table II. Estimated Nuclear-Powered Submarine Personnel Force Strength,
Reported Sick Days and Estimated Hospitalization Rates*
For Personnel Attached to Nuclear-Powered
Submarines: Fiscal Years 1966-1969

	FY 66	FY 67	FY 68	FY 69
ESTIMATED FORCE STRENGTH	10814	13024	13926	14447
SICK DAYS**	16366	17977	17499	20224
HOSPITALIZATION RATE				
SUBMARINERS (ESTIMATED)	0.41	0.49	0.34	0.39
SERVICE-WIDE***	0.77	0.86	1.01	1.04

* HOSPITALIZATION RATE = Sick days per 100 man/year average force strength.

** In Naval Medical Facilities.

*** SERVICE-WIDE HOSPITALIZATION RATES: Based upon admissions to Naval and non-Naval medical facilities, quoted from Statistics of Naval Medicine, FY66-69 annual summaries (NAVMED P-5027). Admissions to station hospitals and METS ships are excluded.

based upon all reported admissions to naval medical services. Information about submariners admitted to non-naval medical facilities are not available. For present purposes the absence of station hospital admissions from the service-wide rates (Table II) does not pose a problem since sick days incurred by submariners in station hospitals could be subtracted from the

totals indicated; which would only amplify the contrast indicated in the table.

Assuming reporting of morbidity data to the Bureau of Medicine and Surgery to be reasonably complete the hospitalization rates for personnel attached to nuclear-powered submarines given in Table II could still be spuriously low if non-naval medical facilities

contributed substantially to submariner medical care. It is known, for example, that Lakenheath Air Force Hospital admits some submariners stationed at Holy Loch; although quantitative estimates are not available. Then too, it appears that should a submariner reach a naval hospital via a non-naval medical facility or even via a submarine tender infirmary there is some risk that the hull number of his submarine might not appear on the admission report; and should this be the case he would not be picked up in our file search.

It is presumed unlikely, however, that the possibilities for missing data suggested in the previous paragraph would offset the contrast between submariner and service-wide hospitalization rates suggested in Table II. On this premise the conclusion by Wilken that submariners in the nuclear Navy are unusually healthy is amply supported.

Although direct comparison between these data and the Wilken review is precluded, some analogies are possible. It is to be kept in mind that while the period reviewed by Wilken (1963-1967) and the period covered by these data (FY-66 — FY-69) overlap, they are not identical. Since it is not clear whether or not the case counts indicated by Wilken is limited to formal admissions to the sick list attention will be directed to sick days reported. Assuming all sick days reported were incurred aboard FBM submarines, the submarine-year base is 360 patrols, each lasting 2 months, or 60 years. Wilken indicated crew sizes of approximately 140 officers and men; but to be consistent with our estimates the allow-

ance of 132 officers and men will be assumed, yielding a 7920 man-year exposure base. We have added sick days reports in all of Wilken's tables for a total of 3672 days yielding a ship-board hospitalization rate of 0.13 sick days/100 man days.

Table III summarizes morbidity data for the fiscal years covered by this report for which Polaris submarines were designated as the reporting medical facilities. The estimated total man-years at risk is 40,516; that is, the sum of the estimated SSBN personnel average force strength for the four fiscal years (Table I). If we suppose all morbidity indicated in Table II occurred on patrol the man-year base would be reduced to one-third of the total indicated or 13,505 man-years. The 1492 sick days reported by SSBN submarines in Table III, therefore, yields a hospitalization rate of 0.03 days/100 man-days.

The two previous paragraphs involve too many conjectures to support firm conclusions. Certain implications, however, appear warranted. First, the ship-board hospitalization rate calculated from these data (.03) compared with the rate estimated from the Wilken review (0.13) suggests that for minor illness aboard the submarines to be reported to the Inpatient Data System are exceptions rather than a rule. Secondly, presuming the medical sections of the Polaris patrol reports reviewed by Wilken to be reasonably complete, possible omissions of data pertaining to sick days incurred aboard submarines from our data are of minor consequence. In fact, the difference between the ship-board hospitalization rate esti-

Table III. Admissions to the Sick-List and Sick Days Reported by Polaris Submarines for Fiscal Years 1966-1969 Inclusive by Diagnostic Section (NAVMED P-5082)

SECTION	CASES	SICK DAYS
1. Infective & Parasitic Diseases.	19	250
2. Neoplasms.	3	16
3. Allergic, Endocrine system, metabolic and Nutritional Diseases.	1	3
4. Diseases of the Blood and Blood Forming Organs.	--	---
5. Mental, Psychoneurotic & Personality Disorders.	2	27
6. Diseases of the Nervous System & Sense Organs.	5	24
7. Diseases of the Circulatory System.	6	23
8. Diseases of the Respiratory System.	25	150
9. Diseases of the Digestive System.	21	196
10. Diseases of the Genito-urinary System.	12	77
11. Diseases of the Skin & Cellular Tissue.	8	60
12. Diseases of Bones & Organs of Movement.	5	72
13. Congenital Malformations.	--	---
14. Symptoms, Senility & Ill-defined conditions.	3	21
15. Classification of Accidents, Poisoning & Violence.	28	573
16. Supplementary Classification for Special Cases.	--	---
TOTAL	137	1492

mated from the Wilken review and these data ($0.13 - 0.03 = 0.10$) could be added to the rate for each year reported in Table II without altering the basic picture.

C. Deaths

Deaths among personnel attached to nuclear-powered submarines for the

four year period are reported in Table IV. Because of the loss of the Scorpion the death rate for the period, of course, has been extremely high.

It appears reasonable to presume that only deaths caused by diseases have obvious relevance to the question of effects of prolonged exposure to the nuclear submarine environment upon crew

Table IV. Deaths Among Personnel Attached to Nuclear Submarines
FY 66-FY 69 by Cause of Death

<u>DISEASES</u>	
MALIGNANT NEOPLASM	3
CEREBRAL & SUBARACHNOID HEMORRHAGE	3
CARDIOVASCULAR DISEASES	4
RESPIRATORY DISEASES *	2
DISEASE TOTAL	12
 <u>ACCIDENTS, VIOLENCE, POISONING</u>	
INJURIES **	47
ASPHYXIATION	2
POISONING	6
BURNS	2
DROWNING	12
LOST AT SEA (SCORPION CREW)	94
ACCIDENTS, VIOLENCE, POISONING TOTAL	165
TOTAL DEATHS	177

* SPONTANEOUS PNEUMOTHORAX AND ENDOCARDITIS 1 CASE

PULMONARY EMBOLISM & DIABETES 1 CASE

** SKULL FRACTURE & MENINGITIS 1 CASE

health. The disease caused death rate among the submariners is very similar to service-wide experience for the same period. To the 12 deaths (Table IV) attributed to disease we add one case (skull fracture/meningitis). The experience base for the 13 deaths is taken to be the sum of the average strength of personnel force for each of the four years (Table IV), that is, 52,238 man-years; which yields a rate of 24.8/10⁶. The overall Navy and Marine Corps death rate attributed to disease remained stable slightly over 30/10⁶ over the period 1966-1968. In the past two years there have been dramatic drops in the service-wide rate, given at 15/10⁶ for FY-68 and 7.8/10⁶ for FY-70.⁴ Relating submariner death rates to a baseline subject to this remarkable change evidently cannot support firm conclusions.

II. INTERIM RESUME'

A. Hospitalization Rates.

Emphasis upon hospitalization rates in earlier paragraphs was dictated by the fact that concurrent service-wide rates were available for comparison. Assuming, however, that the relatively low estimated hospitalization rates for the submarines are essentially accurate, what they disclose about the effect of prolonged exposure to the nuclear submarine environment upon crew health is still quite restricted. One limiting factor is the large contribution of injury cases, which may or may not be occupationally related. Then, too, hospitalization rates may depend heavily upon theoretically non-relevant matters such as availability of hospital

beds and the distribution of minor illness inpatient and outpatient case-loads. Wilken⁷ for example, observed that upper respiratory infections present the greatest number of sick calls to the submarine medical officer, although usually not involving sick days. In these data (Appendix A) upper respiratory infections contribute little to the sick day total. Up-to-date data on this point are not available; but, historically, the Submarine Service appears to have used outpatient care almost exclusively for upper respiratory infections and other minor disorders (Appendix B).

B. Analysis by Diagnostic Classification.

Total admissions and total sick days by diagnostic classification (Appendix A) were compared with analogous statistics for the entire Navy and Marine Corps for fiscal year 1964.³ This, more than the results reported in detail above, is the basis for an earlier statement that preliminary findings have been essentially negative.

As we have noted, however, the Navy Bureau of Medicine and Surgery Inpatient Data System was revised after FY-64. Following study of applicable procedures and a sample of data input the writer was persuaded that technical differences between FY-64 and subsequent data were sufficient that detailed comparison might not be warranted. Moreover, the writer has been advised that service-wide statistical summaries analogous to the material in Appendix A and for the same time period (FY-66 - FY-69) are now in preparation and should be available in the near future.

Accordingly, detailed comparisons by diagnostic classification which we have been able to make are not included in this report. It will suffice to note that the incidence of tuberculosis, malignant and benign neoplasms, certain metabolic disorders (mostly obesity) and diseases of nerves and peripheral ganglia among the submariners are quite similar to the FY-64 Navy and Marine Corps experience. Otherwise, reported illness among the submariners attributable to diseases is low.

DISCUSSION AND SUMMARY

It is realized that some data are missing from the appended statistical summary. It is possible that when the gaps are filled and when more timely medical statistics are available for comparison the picture will be quite different from preliminary findings. This, however, we do not expect.

The security and effectiveness of the nuclear fleet depends upon a physically and psychologically reliable personnel force; and without doubt policies to assure this end are in effect. Should a submariner incur a prolonged or chronic disorder jeopardizing his effectiveness in the fleet we may assume that he would be disqualified for submarine duty. If this is so, then, within limits, the effective force of personnel assigned to nuclear submarines at any given time should be the healthy residual of personnel entering the Submarine Service. Evidence within the data supporting this interpretation is limited but not entirely missing. Among more than 3000 admissions to the sick list during the four-year period only 282

submariners were admitted more than once. Moreover, inspection of details suggests that of the 365 second and subsequent sick list admissions incurred by the 282 submariners a considerable portion, from our viewpoint, were administrative artifacts; e.g., a submariner admitted to the submarine infirmary then admitted to a hospital on the following day on a similar diagnosis. In a word, it appears rare for personnel attached to nuclear submarines to be admitted to the sick list more than once.

The foregoing observation acquires significance in view of findings by Hinkle² and his co-workers that illness is not randomly distributed in the civilian population, and in view of the non-random distribution of illness among Naval enlisted personnel demonstrated in recent studies at the Navy Neuropsychiatric Research Unit.^{5, 6}

If our thesis is valid, then there is no reason to suppose that the morbidity experiences reported for personnel attached to nuclear submarines will necessarily rule out adverse biomedical effects of the nuclear submarine environment upon crew health. For better definition comparative study of the entire military medical experience of submariners regardless of whether or not they remain on submarine duty is needed. The feasibility of developing a cohort for longitudinal study toward this end is now being explored.

There are other obvious loopholes in this preliminary survey. It is known that susceptibility to various diseases is age-related. Also, if exposure to the submarine environment has an ad-

verse effect on personnel, then length of exposure should be a critical variable. It was not possible to consider either age or length of exposure in this report. It is our intention to explore both in subsequent inquiry.

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APPENDIX A

The writer wishes to acknowledge the assistance of Mrs. E. MEGOS in preparing the Tables in this Appendix.

TABLE I. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUBMARINES BY SECTION AND DIAGNOSTIC GROUP NAVMED P-5082

SECTION AND DIAGNOSTIC GROUP	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION AL	SOLE	COMP- LICAT ED	TOTAL	SOLE	COMP- LICATED
I. INFECTIVE AND PARASITIC DISEASES								
A. TUBERCULOSIS OF RESPIRATORY SYSTEM	4	2	1	2	1	221	155	66
B. TUBERCULOSIS, OTHER FORMS								
C. SYPHILIS AND ITS SEQUELAE								
D. GONOCOCCIC INFECTION AND OTHER VENEREAL DISEASES	1	1			1	7		7
E. INFECTIOUS DISEASES COMMONLY ARISING IN INTESTINAL TRACT								
F. OTHER BACTERIAL DISEASES	3	2	1	2		10	10	
G. SPIROCHETAL DISEASES, EXCEPT SYPHILIS								
H. DISEASES ATTRIBUTABLE TO VIRUSES	21	16	5	11	5	313	225	88
J. TYPHUS AND OTHER RICKETTSIAL DISEASES								
K. MALARIA								
L. OTHER INFECTIVE AND PARASITIC DISEASES								
-15- Total	37	26	11	16	10	707	487	220
II. NEOPLASMS								
A. MALIGNANT NEOPLASM OF BUCCAL CAVITY AND PHARYNX								
B. MALIGNANT NEOPLASM OF DIGESTIVE ORGANS AND PERITONEUM								
C. MALIGNANT NEOPLASM OF RESPIRATORY SYSTEM								
D. MALIGNANT NEOPLASM OF BREAST AND GENITOURINARY ORGANS	1	1		1		29	29	
E. MALIGNANT NEOPLASM OF OTHER AND UNSPECIFIED SITES	4	4		3	1	232	229	3
F. NEOPLASMS OF LYMPHATIC AND HEMATOPOIETIC TISSUES	1	1		1		94	94	
G. BENIGN NEOPLASM	53	47	6	45	2	862	351	31
H. NEOPLASM OF UNSPECIFIED NATURE	2	2		2		8	8	
Total	61	55	6	52	3	1,245	1,211	34
III. ALLERGIC, ENDOCRINE SYSTEM, METABOLIC, AND NUTRITIONAL DISEASES								
A. ALLERGIC DISORDERS	4	3	1	3		19	19	
B. DISEASES OF THYROID GLAND	1	1		1		8	8	
C. DIABETES MELLITUS	6	5	1	5		227	227	
D. DISEASES OF OTHER ENDOCRINE GLANDS								
E. AVITAMINOSES AND OTHER METABOLIC DISEASES	9	7	2	3	4	189	58	131
Total	20	16	4	12	4	443	312	131

TABLE I. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUB-MARINES BY SECTION AND DIAGNOSTIC GROUP NAVMED P-5082

SECTION AND DIAGNOSTIC GROUP	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION AL	SOLE	COMP- LICAT ED	TOTAL	SOLE	COMP- LICATED
IV. DISEASES OF THE BLOOD AND BLOOD- FORMING ORGANS								
Total	2	1	1	1	1	9		9
	2	1	1			9		9
V. MENTAL PSYCHONEUROTIC, AND PERSONALITY DISORDERS								
A. PSYCHOSES	9	7	2	7		506	506	
B. PSYCHONEUROTIC DISORDERS	17	14	3	14		631	631	
C. DISORDERS OF CHARACTER, BEHAVIOR, AND INTELLIGENCE								
Total	37	31	6	25	6	783	605	178
	63	52	11	46	6	1,920	1,742	178
VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS								
A. VASCULAR LESIONS AFFECTING CENTRAL NERVOUS SYSTEM								
B. INFLAMMATORY DISEASES OF CENTRAL NERVOUS SYSTEM								
C. OTHER DISEASES OF CENTRAL NERVOUS SYSTEM	6	5	1	4	1	105	84	21
D. DISEASES OF NERVES AND PERIPHERAL GANGLIA	5	2	3	2		91	91	
E. INFLAMMATORY DISEASES OF EYE	6	6		4	2	212	81	131
F. OTHER DISEASES AND CONDITIONS OF EYE	7	5	2	4	1	52	20	32
G. DISEASES OF EAR AND MASTOID PROCESS	7	6	1	4	2	92	74	18
Total	31	24	7	18	6	552	350	202
VII. DISEASES OF THE CIRCULATORY SYSTEM								
A. RHEUMATIC FEVER								
B. CHRONIC RHEUMATIC HEART DISEASE								
C. ARTERIOSCLEROTIC AND DEGENERATIVE HEART DISEASE	1	1			1	13		13
D. OTHER DISEASES OF HEART	2	2		2		121	121	
E. HYPERTENSIVE CARDIOVASCULAR DISEASE	3	1	2	1		33	33	
F. OTHER HYPERTENSIVE DISEASE	14	9	5	8	1	131	110	21
G. DISEASES OF ARTERIES								
H. DISEASES OF VEINS AND OTHER DISEASES OF CIRCULATORY SYSTEM								
Total	11	10	1	9	1	165	110	55
	31	23	8	20	3	463	374	89
VIII. DISEASES OF THE RESPIRATORY SYSTEM								
A. ACUTE UPPER RESPIRATORY INFECTIONS	15	14	1	14		84	84	
B. INFLUENZA	4	4		4		31	31	
C. PNEUMONIA	19	17	2	17		115	115	
D. BRONCHITIS	8	5	3	3	2	201	47	154
E. OTHER DISEASES OF RESPIRATORY SYSTEM								
Total	28	26	2	23	3	476	324	152
	74	66	8	61	5	907	601	306

TABLE I. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUBMARINES BY SECTION AND DIAGNOSTIC GROUP NAVMED P-5082

SECTION AND DIAGNOSTIC GROUP	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION AL	SOLE	COMP- LICAT ED	TOTAL	SOLE	COMP- LICATED
IX. DISEASES OF THE DIGESTIVE SYSTEM								
A. DISEASES OF BUCCAL CAVITY AND ESOPHAGUS	1	1		1		16	16	
B. DISEASES OF STOMACH AND DUODENUM	13	13		10	3	330	278	52
C. APPENDICITIS	19	18	1	18		219	219	
D. HERNIA OF ABDOMINAL CAVITY	37	34	3	25	9	663	435	243
E. OTHER DISEASES OF INTESTINES AND PERITONEUM	26	23	3	19	4	261	159	102
F. DISEASES OF LIVER, GALLBLADDER, AND PANCREAS	8	5	3	3	2	108	23	85
Total	104	94	10	76	18	1,617	1,130	457
X. DISEASES OF THE GENITOURINARY SYSTEM								
A. NEPHRITIS AND NEPHROSIS	2	2		2		49	49	
B. OTHER DISEASES OF URINARY SYSTEM	21	19	2	15	4	447	338	109
C. DISEASES OF MALE GENITAL ORGANS	28	22	6	16	6	338	109	229
D. DISEASES OF BREAST								
Total	51	43	8	33	10	834	496	333
XII. DISEASES OF THE SKIN AND CELLULAR TISSUE								
A. INFECTIONS OF SKIN AND SUBCUTANEOUS TISSUE	28	24	4	21	3	286	154	132
B. OTHER DISEASES OF SKIN AND SUBCUTANEOUS TISSUE	14	11	3	9	2	256	138	118
Total	42	35	7	30	5	542	292	250
XIII. DISEASES OF THE BONES AND ORGANS OF MOVEMENT								
A. ARTHRITIS AND RHEUMATISM, EXCEPT RHEUMATIC FEVER	7	6	1	5	1	210	70	140
B. OSTEOMYELITIS AND OTHER DISEASES OF BONE AND JOINT	37	31	6	25	6	1,128	747	381
C. OTHER DISEASES OF MUSCULOSKELETAL SYSTEM	11	11		10	1	166	130	16
Total	55	48	7	40	8	1,504	857	537
XIV. CONGENITAL MALFORMATIONS	12	8	4	5	3	146	92	54
Total	12	8	4	5	3	146	92	54
XVI. SYMPTOMS, SENILITY, AND ILL-DEFINED CONDITIONS								
A. SYMPTOMS REFERABLE TO SYSTEMS OR ORGANS	20	17	3	11	6	478	232	246
B. SENILITY AND ILL DEFINED DISEASES	26	25	1	23	2	214	196	18
Total	46	42	4	34	8	692	428	264

TABLE I. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUB-MARINES BY SECTION AND DIAGNOSTIC GROUP NAVMED P-5082

SECTION AND DIAGNOSTIC GROUP	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION- AL	SOLE	COMP- LICAT- ED	TOTAL	SOLE	COMP- LICATED
XVII. CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE /NATURE OF INJURY/								
A. FRACTURE OF SKULL, SPINE, AND TRUNK	29	17	12	7	10	716	187	529
B. FRACTURE OF UPPER LIMB	15	7	8	5	2	396	206	190
C. FRACTURE OF LOWER LIMB	17	16	1	14	2	1,011	795	216
D. DISLOCATION WITHOUT FRACTURE	14	12	2	11	1	322	232	90
E. SPRAINS AND STRAINS OF JOINTS AND ADJACENT MUSCLES	24	21	3	20	1	242	227	15
F. HEAD INJURY EXCLUDING SKULL FRACTURE	41	22	19	9	13	384	78	306
G. INTERNAL INJURY OF CHEST, ABDOMEN, AND PELVIS	5	4	1	2	2	73	34	39
H. LACERATION AND OPEN WOUND OF FACE, NECK, AND TRUNK	12	6	6	2	4	120	24	96
J. LACERATION AND OPEN WOUND OF UPPER LIMB	12	10	2	8	2	195	95	100
K. LACERATION AND OPEN WOUND OF LOWER LIMB	4	4		4		50	50	
L. LACERATION AND OPEN WOUNDS OF MULTIPLE LOCATION	4	1	3		1	2		2
M. SUPERFICIAL INJURY	10	2	8	1	1	4		4
N. CONTUSION AND CRUSHING WITH INTACT SKIN SURFACE	12	6	6	3	3	275	34	241
O. EFFECTS OF FOREIGN BODY ENTERING THROUGH ORIFICE								
P. BURNS								
Q. INJURY TO NERVES AND SPINAL CORD WITHOUT BONE INJURY	2	1	1		1	7		7
R. EFFECTS OF POISONS	1		1					
S. EFFECTS OF WEATHER, EXPOSURE, AND RELATED CONDITIONS								
T. OTHER AND UNSPECIFIED INJURIES AND REACTIONS	5	1	4		1	15		15
	207	130	77	86	44	3,812	1,962	1,850
	836	663	173	529	134	15,393	10,444	4,949
XVIII. SUPPLEMENTARY CLASSIFICATIONS FOR SPECIAL CASES								
A. SPECIAL CONDITIONS AND EXAMINATIONS WITHOUT SICKNESS	97	88	9	88		951	951	

TABLE I. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUB-MARINES BY SECTION AND DIAGNOSTIC GROUP NAVMED P-5082

SECTION AND DIAGNOSTIC GROUP	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION- AL	SOLF	COMB- LICAT ED	TOTAL	SOLF	COMB- LICATED
I. INFECTIVE AND PARASITIC DISEASES								
A. TUBERCULOSIS OF RESPIRATORY SYSTEM	8	8		5	3	696	72	624
B. TUBERCULOSIS, OTHER FORMS	1	1		1		82	82	
C. SYPHILIS AND ITS SEQUELAE								
D. GONOCOCCIC INFECTION AND OTHER VENEREAL DISEASES	2	1	1		1	65		65
E. INFECTIOUS DISEASES COMMONLY ARISING IN INTESTINAL TRACT								
F. OTHER BACTERIAL DISEASES	2	2		2		8	8	
G. SPIROCHETAL DISEASES, EXCEPT SYPHILIS								
H. DISEASES ATTRIBUTABLE TO VIRUSES	29	27	2	26	1	401	396	5
J. TYPHUS AND OTHER RICKETTSIAL DISEASES								
K. MALARIA								
L. OTHER INFECTIVE AND PARASITIC DISEASES								
Total	43	40	3	35	5	1,341	647	694
II. NEOPLASMS								
A. MALIGNANT NEOPLASM OF BUCCAL CAVITY AND PHARYNX								
B. MALIGNANT NEOPLASM OF DIGESTIVE ORGANS AND PERITONEUM								
C. MALIGNANT NEOPLASM OF RESPIRATORY SYSTEM								
D. MALIGNANT NEOPLASM OF BREAST AND GENITOURINARY ORGANS								
E. MALIGNANT NEOPLASM OF OTHER AND UNSPECIFIED SITES	2	1	1		1	17		17
F. NEOPLASMS OF LYMPHATIC AND HEMATOPOIETIC TISSUES								
G. BENIGN NEOPLASM	55	50	5	44	6	1,239	1,126	113
H. NEOPLASM OF UNSPECIFIED NATURE	7	7		5	2	178	59	119
Total	64	58	6	49	9	1,434	1,185	249
III. ALLERGIC, ENDOCRINE SYSTEM, METABOLIC, AND NUTRITIONAL DISEASES								
A. ALLERGIC DISORDERS	7	5	2	3	2	44	9	35
B. DISEASES OF THYROID GLAND	2	2		1	1	32	12	20
C. DIABETES MELLITUS	5	5		4	1	295	213	82
D. DISEASES OF OTHER ENDOCRINE GLANDS								
E. AVITAMINOSES AND OTHER METABOLIC DISEASES								
Total	22	19	3	11	4	374	243	135

TABLE I. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUBMARINES BY SECTION AND DIAGNOSTIC GROUP NAVMED P-5082

SECTION AND DIAGNOSTIC GROUP	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION AL	SOLE	COMP- LICAT ED	TOTAL	SOLE	COMP- LICATED
IV. DISEASES OF THE BLOOD AND BLOOD- FORMING ORGANS								
	1	1		1		38	38	
Total	1	1		1		38	38	
V. MENTAL PSYCHONEUROTIC, AND PERSONALITY DISORDERS								
A. PSYCHOSES	14	12	2	11	1	595	446	149
B. PSYCHONEUROTIC DISORDERS	16	13	3	9	4	324	171	153
C. DISORDERS OF CHARACTER, BEHAVIOR, AND INTELLIGENCE	31	28	3	25	3	865	634	231
Total	61	53	8	45	8	1,784	1,251	533
VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS								
A. VASCULAR LESIONS AFFECTING CENTRAL NERVOUS SYSTEM								
B. INFLAMMATORY DISEASES OF CENTRAL NERVOUS SYSTEM	3	2	1	2		112	112	
C. OTHER DISEASES OF CENTRAL NERVOUS SYSTEM	3	1	2	1		15	15	
D. DISEASES OF NERVES AND PERIPHERAL GANGLIA	4	3	1	2	1	79	75	4
E. INFLAMMATORY DISEASES OF EYE	3	2	1	1	1	26	5	21
F. OTHER DISEASES AND CONDITIONS OF EYE	9	9		6	3	123	67	56
G. DISEASES OF EAR AND MASTOID PROCESS								
Total	22	17	5	12	5	355	274	81
VII. DISEASES OF THE CIRCULATORY SYSTEM								
A. RHEUMATIC FEVER								
B. CHRONIC RHEUMATIC HEART DISEASE	1		1					
C. ARTERIOSCLEROTIC AND DEGENERATIVE HEART DISEASE	6	3	3	2	1	206	198	8
D. OTHER DISEASES OF HEART								
E. HYPERTENSIVE CARDIOVASCULAR DISEASE								
F. OTHER HYPERTENSIVE DISEASE	13	10	3	9	1	172	144	28
G. DISEASES OF ARTERIES	1	1			1	1		1
H. DISEASES OF VEINS AND OTHER DISEASES OF CIRCULATORY SYSTEM	17	14	3	14		234	234	
Total	38	28	10	25	3	613	576	37

TABLE I: ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUB-MARINES BY SECTION AND DIAGNOSTIC GROUP NAVMED P-5082

SECTION AND DIAGNOSTIC GROUP	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION- AL	SOLE	COMP- LICAT- ED	TOTAL	SOLE	COMP- LICATED
VIII. DISEASES OF THE RESPIRATORY SYSTEM								
A. ACUTE UPPER RESPIRATORY INFECTIONS	17	14	3	12	2	77	64	13
B. INFLUENZA	3	3		3		10	10	
C. PNEUMONIA	16	16		13	3	270	163	107
D. BRONCHITIS	4	3	1	2	1	10	4	6
E. OTHER DISEASES OF RESPIRATORY SYSTEM	38	29	9	26	3	669	588	81
Total	78	65	13	56	9	1,036	829	207
IX. DISEASES OF THE DIGESTIVE SYSTEM								
A. DISEASES OF BUCCAL CAVITY AND ESOPHAGUS	5	4	1	2	2	91	28	63
B. DISEASES OF STOMACH AND DUODENUM	12	11	1	7	4	455	259	196
C. APPENDICITIS	25	22	3	20	2	385	305	80
D. HERNIA OF ABDOMINAL CAVITY	29	24	5	20	4	327	242	85
E. OTHER DISEASES OF INTESTINES AND PERITONEUM	30	22	8	19	3	398	341	57
F. DISEASES OF LIVER, GALLBLADDER, AND PANCREAS	7	6	1	6		173	173	
Total	108	89	19	74	15	1,829	1,348	481
X. DISEASES OF THE GENITOURINARY SYSTEM								
A. NEPHRITIS AND NEPHROSIS	17	16	1	14	2	175	159	16
B. OTHER DISEASES OF URINARY SYSTEM	25	22	3	15	7	232	147	85
C. DISEASES OF MALE GENITAL ORGANS	2	2		2		28	28	
D. DISEASES OF BREAST								
Total	44	40	4	31	9	435	334	101
XII. DISEASES OF THE SKIN AND CELLULAR TISSUE								
A. INFECTIONS OF SKIN AND SUBCUTANEOUS TISSUE	31	28	3	22	6	235	143	92
B. OTHER DISEASES OF SKIN AND SUBCUTANEOUS TISSUE	12	8	4	7	1	339	72	267
Total	43	36	7	29	7	574	215	359
XIII. DISEASES OF THE BONES AND ORGANS OF MOVEMENT								
A. ARTHRITIS AND RHEUMATISM, EXCEPT RHEUMATIC FEVER	12	8	4	4	4	256	112	144
B. OSTEOMYELITIS AND OTHER DISEASES OF BONE AND JOINT	30	23	7	21	2	1,208	1,114	94
C. OTHER DISEASES OF MUSCULOSKELETAL SYSTEM	11	8	3	6	2	226	104	122
Total	53	39	14	31	8	1,690	1,330	360

TABLE I. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUB-MARINES BY SECTION AND DIAGNOSTIC GROUP NAVMED P-5082

SECTION AND DIAGNOSTIC GROUP	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION AL	SOLE	COMP- LICAT ED	TOTAL	SOLE	COMP- LICATED
XIV. CONGENITAL MALFORMATIONS								
Total	4	3	1	2	1	68	57	11
	4	3	1	2	1	68	57	11
XVI. SYMPTOMS, SENILITY, AND ILL-DEFINED CONDITIONS								
A. SYMPTOMS REFERABLE TO SYSTEMS OR ORGANS	21	20	1	14	6	203	136	67
B. SENILITY AND ILL DEFINED DISEASES	24	20	4	18	2	217	201	16
Total	45	40	5	32	8	420	337	83
XVII. CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE /NATURE OF INJURY/								
A. FRACTURE OF SKULL, SPINE, AND TRUNK	27	14	13	8	6	410	337	73
B. FRACTURE OF UPPER LIMB	13	8	5	8		215	215	
C. FRACTURE OF LOWER LIMB	21	16	5	13	3	1,005	655	350
D. DISLOCATION WITHOUT FRACTURE	8	7	1	6	1	305	246	59
E. SPRAINS AND STRAINS OF JOINTS AND ADJACENT MUSCLES	45	38	7	37	1	590	510	80
F. HEAD INJURY EXCLUDING SKULL FRACTURE	27	14	13	7	7	99	56	43
G. INTERNAL INJURY OF CHEST, ABDOMEN, AND PELVIS	7	4	3	1	3	83	7	76
H. LACERATION AND OPEN WOUND OF FACE, NECK, AND TRUNK	24	12	12	5	7	251	49	202
J. LACERATION AND OPEN WOUND OF UPPER LIMB	13	11	2	9	2	319	237	82
K. LACERATION AND OPEN WOUND OF LOWER LIMB	10	8	2	5	3	179	78	101
L. LACERATION AND OPEN WOUNDS OF MULTIPLE LOCATION	3	1	2		1	11		11
M. SUPERFICIAL INJURY	10	4	6		4	114		114
N. CONTUSION AND CRUSHING WITH INTACT SKIN SURFACE	21	10	11	5	5	66	31	35
O. EFFECTS OF FOREIGN BODY ENTERING THROUGH ORIFICE	1	1		1		23	23	
P. BURNS	8	7	1	5	2	140	119	21
Q. INJURY TO NERVES AND SPINAL CORD WITHOUT BONE INJURY	1		1					
R. EFFECTS OF POISONS	2		2					
S. EFFECTS OF WEATHER, EXPOSURE, AND RELATED CONDITIONS								
T. OTHER AND UNSPECIFIED INJURIES AND REACTIONS	12	9	3	6	3	165	26	139
Total	253	164	69	116	48	3,975	2,569	1,366
	879	692	187	549	143	16,131	11,277	4,854

TABLE I. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUB-MARINES BY SECTION AND DIAGNOSTIC GROUP NAVMED P-5082

SECTION AND DIAGNOSTIC GROUP	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION AL	SOLE	COMP- LICAT ED	TOTAL	SOLE	COMP- LICATED
XVIII. SUPPLEMENTARY CLASSIFICATIONS FOR SPECIAL CASES								
A. SPECIAL CONDITIONS AND EXAMINATIONS WITHOUT SICKNESS	152	134	18	131	3	1,840	1,815	25
B. CONVALESCENT CARE, PLASTIC TREATMENT AND FITTING OF PROSTHETIC DEVICES	1		1					
Total	153	134	19	131	3	1,840	1,815	25

TABLE I. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUBMARINES BY SECTION AND DIAGNOSTIC GROUP NAVMED P-5082

SECTION AND DIAGNOSTIC GROUP	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION AL	SOLE	COM- PLICAT ED	TOTAL	SOLE	COMP- LICATED
I. INFECTIVE AND PARASITIC DISEASES								
A. TUBERCULOSIS OF RESPIRATORY SYSTEM	2	2		2		104	104	
B. TUBERCULOSIS, OTHER FORMS								
C. SYPHILIS AND ITS SEQUELAE	1	1		1		6	6	
D. GONOCOCCIC INFECTION AND OTHER VENEREAL DISEASES								
E. INFECTIOUS DISEASES COMMONLY ARISING IN INTESTINAL TRACT	2	1	1		1	9		9
F. OTHER BACTERIAL DISEASES	3	3		3		14	14	
G. SPIROCHETAL DISEASES, EXCEPT SYPHILIS	1	1			1	14		14
H. DISEASES ATTRIBUTABLE TO VIRUSES	29	26	3	24	2	307	357	30
J. TYPHUS AND OTHER RICKETTSIAL DISEASES								
K. MALARIA								
L. OTHER INFECTIVE AND PARASITIC DISEASES	2	2			2	28		28
Total	40	36	4	30	6	562	481	81
II. NEOPLASMS								
A. MALIGNANT NEOPLASM OF BUCCAL CAVITY AND PHARYNX	2	2		2		15	15	
B. MALIGNANT NEOPLASM OF DIGESTIVE ORGANS AND PERITONEUM	1	1		1		76	76	
C. MALIGNANT NEOPLASM OF RESPIRATORY SYSTEM								
D. MALIGNANT NEOPLASM OF BREAST AND GENITOURINARY ORGANS								
E. MALIGNANT NEOPLASM OF OTHER AND UNSPECIFIED SITES	1	1			1	49		49
F. NEOPLASMS OF LYMPHATIC AND HEMATOPOIETIC TISSUES								
G. BENIGN NEOPLASM	53	48	5	39	9	868	738	130
H. NEOPLASM OF UNSPECIFIED NATURE	2	2		2		47	47	
Total	59	54	5	44	10	1,055	876	179
III. ALLERGIC, ENDOCRINE SYSTEM, METABOLIC, AND NUTRITIONAL DISEASES								
A. ALLERGIC DISORDERS	7	3	4	1	2	121	6	115
B. DISEASES OF THYROID GLAND	3	3		2	1	246	37	209
C. DIABETES MELLITUS	5	5		2	3	141	59	82
D. DISEASES OF OTHER ENDOCRINE GLANDS	1		1					
E. AVITAMINOSES AND OTHER METABOLIC DISEASES	6	2	4	2		64	64	
Total	22	13	9	7	6	572	166	406

TABLE I. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUBMARINES BY SECTION AND DIAGNOSTIC GROUP NAVMED P-5082

SECTION AND DIAGNOSTIC GROUP	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION AL	SOLE	COMP- LICAT ED	TOTAL	SOLE	COMP- LICATED
IV. DISEASES OF THE BLOOD AND BLOOD- FORMING ORGANS								
V. MENTAL PSYCHONEUROTIC, AND PERSONALITY DISORDERS								
A. PSYCHOSES	11	9	2	8	1	420	310	110
B. PSYCHONEUROTIC DISORDERS	23	20	3	18	2	700	690	90
C. DISORDERS OF CHARACTER, BEHAVIOR, AND INTELLIGENCE	34	33	1	28	5	820	693	127
Total	68	62	6	54	8	2,020	1,693	327
VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS								
A. VASCULAR LESIONS AFFECTING CENTRAL NERVOUS SYSTEM	2	1	1	1		1	1	
B. INFLAMMATORY DISEASES OF CENTRAL NERVOUS SYSTEM								
C. OTHER DISEASES OF CENTRAL NERVOUS SYSTEM	5	3	2	2	1	136	31	105
D. DISEASES OF NERVES AND PERIPHERAL GANGLIA	12	11	1	8	3	1 040	107	933
E. INFLAMMATORY DISEASES OF EYE	6	6		5	1	24	17	7
F. OTHER DISEASES AND CONDITIONS OF EYE	7	4	3	4		30	30	
G. DISEASES OF EAR AND MASTOID PROCESS	6	6		4	2	118	66	52
Total	38	31	7	24	7	1,349	252	1,097
VII. DISEASES OF THE CIRCULATORY SYSTEM								
A. RHEUMATIC FEVER								
B. CHRONIC RHEUMATIC HEART DISEASE								
C. ARTERIOSCLEROTIC AND DEGENERATIVE HEART DISEASE	6	3	3	1	2	256	121	135
D. OTHER DISEASES OF HEART	2	1	1		1	27		27
E. HYPERTENSIVE CARDIOVASCULAR DISEASE	2	1	1		1	27		27
F. OTHER HYPERTENSIVE DISEASE	8	5	3	4	1	121	103	18
G. DISEASES OF ARTERIES								
H. DISEASES OF VEINS AND OTHER DISEASES OF CIRCULATORY SYSTEM	20	13	7	9	4	284	194	90
Total	38	23	15	14	9	715	418	297
VIII. DISEASES OF THE RESPIRATORY SYSTEM								
A. ACUTE UPPER RESPIRATORY INFECTIONS	11	8	3	7	1	67	47	20
B. INFLUENZA	12	11	1	11		52	52	
C. PNEUMONIA	26	26		24	2	245	221	24
D. BRONCHITIS	6	3	3	3		14	14	
E. OTHER DISEASES OF RESPIRATORY SYSTEM	30	24	6	24		425	425	
Total	85	72	13	69	3	803	759	44

TABLE 1. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUBMARINES BY SECTION AND DIAGNOSTIC GROUP NAVMED P-5082

SECTION AND DIAGNOSTIC GROUP	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION- AL	SOLE	COMP- LICAT- ED	TOTAL	SOLE	COMP- LICATED
IX. DISEASES OF THE DIGESTIVE SYSTEM								
A. DISEASES OF BUCCAL CAVITY AND ESOPHAGUS	7	5	2	2	3	73	10	63
B. DISEASES OF STOMACH AND DUODENUM	22	18	4	17	1	472	454	18
C. APPENDICITIS	25	24	1	21	3	355	263	92
D. HERNIA OF ABDOMINAL CAVITY	37	29	8	26	3	449	410	39
E. OTHER DISEASES OF INTESTINES AND PERITONEUM	19	11	8	7	4	210	40	170
F. DISEASES OF LIVER, GALLBLADDER, AND PANCREAS	5	5		3	2	134	43	91
Total	115	92	23	76	16	1,693	1,220	473
X. DISEASES OF THE GENITOURINARY SYSTEM								
A. NEPHRITIS AND NEPHROSIS	1		1					
B. OTHER DISEASES OF URINARY SYSTEM	14	12	2	11	1	140	127	13
C. DISEASES OF MALE GENITAL ORGANS	28	24	4	21	3	175	139	36
D. DISEASES OF BREAST	2	1	1		1	15		15
Total	45	37	6	32	5	330	266	64
XII. DISEASES OF THE SKIN AND CELLULAR TISSUE								
A. INFECTIONS OF SKIN AND SUBCUTANEOUS TISSUE	17	15	2	12	3	169	75	94
B. OTHER DISEASES OF SKIN AND SUBCUTANEOUS TISSUE	10	9	1	7	2	165	126	39
Total	27	24	3	19	5	334	201	133
XIII. DISEASES OF THE BONES AND ORGANS OF MOVEMENT								
A. ARTHRITIS AND RHEUMATISM, EXCEPT RHEUMATIC FEVER	8	8		8		684	684	
B. OSTEOMYELITIS AND OTHER DISEASES OF BONE AND JOINT	40	31	9	28	3	1 403	1 279	124
C. OTHER DISEASES OF MUSCULOSKELETAL SYSTEM	10	8	2	6	2	310	233	77
Total	58	47	11	42	5	2,397	2,196	201
XIV. CONGENITAL MALFORMATIONS	15	13	2	9	4	577	195	382
Total	15	13	2	9	4	577	195	382
XVI. SYMPTOMS, SENILITY, AND ILL-DEFINED CONDITIONS								
A. SYMPTOMS REFERABLE TO SYSTEMS OR ORGANS	14	10	4	6	4	162	82	80
B. SENILITY AND ILL DEFINED DISEASES	30	27	3	21	6	322	261	61
Total	44	37	7	27	10	484	343	141

TABLE I. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUBMARINES BY SECTION AND DIAGNOSTIC GROUP NAVMED P-5082

SECTION AND DIAGNOSTIC GROUP	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION- AL	SOLE	COMP- LICAT- ED	TOTAL	SOLE	COMP- LICATED
VII. CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE /NATURE OF INJURY/								
A. FRACTURE OF SKULL, SPINE, AND TRUNK	33	15	18	4	11	669	89	800
B. FRACTURE OF UPPER LIMB	15	12	3	8	4	371	222	149
C. FRACTURE OF LOWER LIMB	28	15	13	9	6	1,151	653	498
D. DISLOCATION WITHOUT FRACTURE	15	11	4	11		337	337	
E. SPRAINS AND STRAINS OF JOINTS AND ADJACENT MUSCLES	23	19	4	13	6	456	95	361
F. HEAD INJURY EXCLUDING SKULL FRACTURE	30	15	15	4	11	240	13	227
G. INTERNAL INJURY OF CHEST, ABDOMEN, AND PELVIS	8	2	6	1	1	59	5	54
H. LACERATION AND OPEN WOUND OF FACE, NECK, AND TRUNK	25	16	9	5	11	267	26	241
J. LACERATION AND OPEN WOUND OF UPPER LIMB	11	7	4	5	2	208	167	41
K. LACERATION AND OPEN WOUND OF LOWER LIMB	12	7	5	5	2	103	89	14
L. LACERATION AND OPEN WOUNDS OF MULTIPLE LOCATION	4	2	2	1	1	38	15	23
M. SUPERFICIAL INJURY	14	2	12	1	1	90	84	6
N. CONTUSION AND CRUSHING WITH INTACT SKIN SURFACE	28	13	15	8	5	67	49	18
O. EFFECTS OF FOREIGN BODY ENTERING THROUGH ORIFICE								
P. BURNS	3	3		3		40	40	
Q. INJURY TO NERVES AND SPINAL CORD WITHOUT BONE INJURY	2	2		2		43	43	
R. EFFECTS OF POISONS	3	2	1	1	1	5	1	4
S. EFFECTS OF WEATHER, EXPOSURE, AND RELATED CONDITIONS	2	2		2		8	8	
T. OTHER AND UNSPECIFIED INJURIES AND REACTIONS	8	4	4	3	1	59	55	24
Total	264	149	115	86	63	4,431	1,971	2,460
	918	690	228	533	157	17,342	11,057	6,285

TABLE I. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUB-MARINES BY SECTION AND DIAGNOSTIC GROUP NAVMED P-5082

SECTION AND DIAGNOSTIC GROUP	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION- AL	SOLE	COMP- LICAT- ED	TOTAL	SOLE	COMP- LICATED
XVIII. SUPPLEMENTARY CLASSIFICATIONS FOR SPECIAL CASES								
A. SPECIAL CONDITIONS AND EXAMINATIONS WITHOUT SICKNESS	11	6	5	6		177	177	
B. CONVALESCENT CARE, PLASTIC TREATMENT AND FITTING OF PROSTHETIC DEVICES	1		1					
	12	6	6	6		177	177	

TABLE 1. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUBMARINES BY SECTION AND DIAGNOSTIC GROUP NAVMED P-5082

SECTION AND DIAGNOSTIC GROUP	INCIDENCE			ADMITTED		SICK DAYS		
	TOTAL	AD- MIT- TED	ADDI- TION- AL	SOLE	COMP- LICAT- ED	TOTAL	SOLE	COMP- LICATED
I. INFECTIVE AND PARASITIC DISEASES								
A. TUBERCULOSIS OF RESPIRATORY SYSTEM	7	7		6	1	382	118	264
B. TUBERCULOSIS, OTHER FORMS	1	1			1	265		265
C. SYPHILIS AND ITS SEQUELAE	1	1			1	3		3
D. GONOCOCCIC INFECTION AND OTHER VENEREAL DISEASES	3	1	2		1	8		8
E. INFECTIOUS DISEASES COMMONLY ARISING IN INTESTINAL TRACT	1	1		1		2	2	
F. OTHER BACTERIAL DISEASES	5	5		2	3	55	6	49
G. SPIROCHETAL DISEASES, EXCEPT SYPHILIS								
H. DISEASES ATTRIBUTABLE TO VIRUSES	54	47	7	41	6	844	701	143
J. TYPHUS AND OTHER RICKETTSIAL DISEASES								
K. MALARIA								
L. OTHER INFECTIVE AND PARASITIC DISEASES	5	3	2	2	1	136	122	14
Total	77	66	11	52	14	1,655	549	746
II. NEOPLASMS								
A. MALIGNANT NEOPLASM OF BUCCAL CAVITY AND PHARYNX	1	1		1		130	130	
B. MALIGNANT NEOPLASM OF DIGESTIVE ORGANS AND PERITONEUM	1		1					
C. MALIGNANT NEOPLASM OF RESPIRATORY SYSTEM	3	2	1	1	1	116	51	65
D. MALIGNANT NEOPLASM OF BREAST AND GENITOURINARY ORGANS	3	3		3		217	217	
E. MALIGNANT NEOPLASM OF OTHER AND UNSPECIFIED SITES	4	2	2		2	648		648
F. NEOPLASMS OF LYMPHATIC AND HEMATOPOIETIC TISSUES	3	3		3		308	308	
G. BENIGN NEOPLASM	46	43	3	37	6	828	698	130
H. NEOPLASM OF UNSPECIFIED NATURE	6	5	1	4	1	71	67	4
Total	67	59	8	49	10	2,318	1,471	847
III. ALLERGIC, ENDOCRINE SYSTEM, METABOLIC, AND NUTRITIONAL DISEASES								
A. ALLERGIC DISORDERS	2	1	1	1		15	15	
B. DISEASES OF THYROID GLAND	3	3		3		111	111	
C. DIABETES MELLITUS	9	9		7	2	462	402	60
D. DISEASES OF OTHER ENDOCRINE GLANDS								
E. AVITAMINOSES AND OTHER METABOLIC DISEASES	5	2	3		2	545		545
Total	19	15	4	11	4	1,133	528	605

TABLE I. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUBMARINES BY SECTION AND DIAGNOSTIC GROUP NAVMED P-5082

SECTION AND DIAGNOSTIC GROUP	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TIONAL	SOLE	COM- PLICAT ED	TOTAL	SOLE	COM- PLICATED
IV. DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS								
Total	1	1		1		56	56	
V. MENTAL PSYCHONEUROTIC, AND PERSONALITY DISORDERS								
A. PSYCHOSES	7	7		7		454	454	
B. PSYCHONEUROTIC DISORDERS	18	17	1	11	6	575	343	232
C. DISORDERS OF CHARACTER, BEHAVIOR, AND INTELLIGENCE	35	30	5	26	4	816	744	72
Total	60	54	6	44	10	1,845	1,541	304
VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS								
A. VASCULAR LESIONS AFFECTING CENTRAL NERVOUS SYSTEM	3	2	1	1	1	50	1	49
B. INFLAMMATORY DISEASES OF CENTRAL NERVOUS SYSTEM	2	2		2		25	25	
C. OTHER DISEASES OF CENTRAL NERVOUS SYSTEM	8	6	2	5	1	249	188	61
D. DISEASES OF NERVES AND PERIPHERAL GANGLIA	7	4	3	2	2	235	16	219
E. INFLAMMATORY DISEASES OF EYE	5	3	2	2	1	65	28	37
F. OTHER DISEASES AND CONDITIONS OF EYE	8	6	2	5	1	87	28	59
G. DISEASES OF EAR AND MASTOID PROCESS	13	9	4	6	3	153	150	3
Total	46	32	14	23	9	864	436	428
VII. DISEASES OF THE CIRCULATORY SYSTEM								
A. RHEUMATIC FEVER								
B. CHRONIC RHEUMATIC HEART DISEASE								
C. ARTERIOSCLEROTIC AND DEGENERATIVE HEART DISEASE	1	1		1		45	45	
D. OTHER DISEASES OF HEART	4	3	1	2	1	12	9	3
E. HYPERTENSIVE CARDIOVASCULAR DISEASE								
F. OTHER HYPERTENSIVE DISEASE	9	6	3	4	2	172	114	58
G. DISEASES OF ARTERIES	2	1	1	1		71	71	
H. DISEASES OF VEINS AND OTHER DISEASES OF CIRCULATORY SYSTEM	16	13	3	10	3	143	83	60
Total	32	24	8	18	6	443	322	121
VIII. DISEASES OF THE RESPIRATORY SYSTEM								
A. ACUTE UPPER RESPIRATORY INFECTIONS	12	10	2	10		39	39	
B. INFLUENZA	11	11		11		36	36	
C. PNEUMONIA	18	16	2	15	1	126	113	13
D. BRONCHITIS	10	9	1	9		81	81	
E. OTHER DISEASES OF RESPIRATORY SYSTEM	29	25	4	20	5	358	211	147
Total	80	71	9	65	6	640	480	160

TABLE I. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUB-MARINES BY SECTION AND DIAGNOSTIC GROUP NAVMED P-5082

SECTION AND DIAGNOSTIC GROUP	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION- AL	SOLE	COMP- LICAT- ED	TOTAL	SOLE	COMP- LICATED
IX. DISEASES OF THE DIGESTIVE SYSTEM								
A. DISEASES OF BUCCAL CAVITY AND ESOPHAGUS	10	10		9	1	64	48	16
B. DISEASES OF STOMACH AND DUODENUM	14	11	3	8	3	134	116	18
C. APPENDICITIS	32	29	3	26	3	375	350	25
D. HERNIA OF ABDOMINAL CAVITY	30	23	7	19	4	432	353	79
E. OTHER DISEASES OF INTESTINES AND PERITONEUM	27	19	8	19		276	276	
F. DISEASES OF LIVER, GALLBLADDER, AND PANCREAS	9	4	5	4		31	31	
Total	122	96	26	85	11	1,312	1,174	138
X. DISEASES OF THE GENITOURINARY SYSTEM								
A. NEPHRITIS AND NEPHROSIS	1		1					
B. OTHER DISEASES OF URINARY SYSTEM	24	18	6	12	6	331	131	200
C. DISEASES OF MALE GENITAL ORGANS	29	25	4	24	1	153	140	13
D. DISEASES OF BREAST	1	1		1		4	4	
Total	55	44	11	37	7	488	275	213
XII. DISEASES OF THE SKIN AND CELLULAR TISSUE								
A. INFECTIONS OF SKIN AND SUBCUTANEOUS TISSUE	19	17	2	16	1	112	84	28
B. OTHER DISEASES OF SKIN AND SUBCUTANEOUS TISSUE	18	9	9	6	3	178	83	95
Total	37	26	11	22	4	290	167	123
XIII. DISEASES OF THE BONES AND ORGANS OF MOVEMENT								
A. ARTHRITIS AND RHEUMATISM, EXCEPT RHEUMATIC FEVER	9	6	3	5	1	204	134	70
B. OSTEOMYELITIS AND OTHER DISEASES OF BONE AND JOINT	51	34	17	28	6	2,013	1,270	743
C. OTHER DISEASES OF MUSCULOSKELETAL SYSTEM	14	11	3	10	1	371	307	64
Total	74	51	23	43	8	2,588	1,711	877
XIV. CONGENITAL MALFORMATIONS	9	8	1	4	4	274	130	144
Total	9	8	1	4	4	274	130	144
XVI. SYMPTOMS, SENILITY, AND ILL-DEFINED CONDITIONS								
A. SYMPTOMS REFERABLE TO SYSTEMS OR ORGANS	20	16	4	10	6	454	150	304
B. SENILITY AND ILL DEFINED DISEASES	20	14	6	10	4	190	49	141
Total	40	30	10	20	10	644	199	445

TABLE I. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUB-MARINES BY SECTION AND DIAGNOSTIC GROUP NAVMED P-5082

SECTION AND DIAGNOSTIC GROUP	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION AL	SOLE	COM- PLICAT ED	TOTAL	SOLE	COM- PLICATED
XVII. CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE /NATURE OF INJURY/								
A. FRACTURE OF SKULL, SPINE, AND TRUNK	31	21	10	13	8	1,297	792	505
B. FRACTURE OF UPPER LIMB	21	12	9	6	6	517	393	124
C. FRACTURE OF LOWER LIMB	38	22	16	15	7	1,433	698	735
D. DISLOCATION WITHOUT FRACTURE	16	15	1	13	2	379	267	112
E. SPRAINS AND STRAINS OF JOINTS AND ADJACENT MUSCLES	17	14	3	11	3	248	167	81
F. HEAD INJURY EXCLUDING SKULL FRACTURE	20	12	8	5	7	58	41	17
G. INTERNAL INJURY OF CHEST, ABDOMEN, AND PELVIS	5	2	3		2	118		118
H. LACERATION AND OPEN WOUND OF FACE, NECK, AND TRUNK	19	9	10	4	5	84	27	57
J. LACERATION AND OPEN WOUND OF UPPER LIMB	21	15	6	13	2	525	476	49
K. LACERATION AND OPEN WOUND OF LOWER LIMB	11	6	5	5	1	191	41	150
L. LACERATION AND OPEN WOUNDS OF MULTIPLE LOCATION	4	1	3		1	79		79
M. SUPERFICIAL INJURY	7	2	4		3	31		31
N. CONTUSION AND CRUSHING WITH INTACT SKIN SURFACE	12	8	4	7	1	110	105	5
O. EFFECTS OF FOREIGN BODY ENTERING THROUGH ORIFICE								
P. BURNS	4	4		3	1	44	43	1
Q. INJURY TO NERVES AND SPINAL CORD WITHOUT BONE INJURY	3		3					
R. EFFECTS OF POISONS	4	4		2	2	18	7	11
S. EFFECTS OF WEATHER, EXPOSURE, AND RELATED CONDITIONS								
T. OTHER AND UNSPECIFIED INJURIES AND REACTIONS	11	10	1	6	4	366	56	310
	244	158	86	103	55	5,498	3,113	2,385
	963	735	228	577	158	20,088	12,552	7,536

TABLE I. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUBMARINES BY SECTION AND DIAGNOSTIC GROUP NAVMED P-5082

SECTION AND DIAGNOSTIC GROUP	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION- AL	SOLF	COMB- LICAT- ED	TOTAL	SOLF	COMP- LICATED

XVIII. SUPPLEMENTARY CLASSIFICATIONS FOR
SPECIAL CASESA. SPECIAL CONDITIONS AND EXAMINATIONS
WITHOUT SICKNESS

17 9 8 9 146 146

B. CONVALESCENT CARE, PLASTIC TREATMENT
AND FITTING OF PROSTHETIC DEVICES

4 4

Total 21 9 12 9 146 146

NOTES FOR TABLE II, APPENDIX A

GENERAL: Table II is intended to provide details with respect to specific medical conditions. Much reported morbidity has been omitted from this table; hence for an overall picture Table I (by fiscal year) should be consulted. Each specific diagnosis for which 100 or more sick days were incurred in any one fiscal year appears in Table II.

A few categories are significant primarily not for what they include, but for what they omit. A case in point is "hernia or abdominal cavity without mention of obstruction" (Table II, page 8). These may be compared with all hernia cases in Table I to determine the statistics pertaining to the presumably more acute cases involving intestinal obstruction.

In general Table II classifications are based upon the three high-order digits of the DDDIC (NAVMED P-5082) which should be consulted for detail. Again hernia cases provide an example. While inguinal hernia are predominant scattered cases of other types of abdominal cavity hernia (NAVMED P-5082, pp 1-146f) are included.

SPECIAL ENTRIES: As a rule "other" or catch-all diagnostic categories are excluded from Table II regardless of sick days involved. Exceptions to the rule are noted below:

1. OTHER, MOSTLY ACUTE SITUATIONAL MALADJUSTMENT. Of the 41 admissions indicated 38 cases accounting for a total of 1,045 sick days

were diagnosed acute situational maladjustment (page 4).

2. OSTEOARTHRITIS AND ALLIED CONDITIONS. The two FY-66 cases were spondylitis osteoarthritis, all others were osteoarthritis (page 9).

3. OTHER SPECIFIED FORMS OF ARTHRITIS. These cases are reported in detail to permit combination with the previous group for a near complete summary of arthritic conditions. Five admissions (84 sick-days) for unspecified arthritis are reported (page 9).

4. SYMPTOMS, SENILITY AND ILL DEFINED CONDITIONS, NERVOUS SYSTEM AND SPECIAL SENSES. Most sick days in this group were attributed to convulsions and focal motor cortical seizures (7 cases). Abnormal involuntary movement accounted for most of the remaining cases (page 11).

5. OTHER NERVOUS SYSTEM AND SPECIAL SENSES. One admission for encephalopathy (FY-66) and an additional diagnosis of cranial nerve disturbance are indicated. This and the previous group may be combined with Section VI for a complete summary of nervous system and special sense problems.

6. OBSERVATION, WITHOUT NEED FOR FURTHER MEDICAL CARE. These statistics are reported because of the relatively large number of sick days involved. Five cases were for psychiatric observation, 5 were for drunkenness and 3 were for improper use of drugs. Otherwise the reasons for observation are not indicated.

TABLE II. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUBMARINES FY 66 THROUGH FY 69 INCLUSIVE BY SELECTED DIAGNOSES NAVMED P-5082

SECTION AND DIAGNOSIS BY FISCAL YEAR OF DISCHARGE	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION- AL	SOLE	COMP- LICAT- ED	TOTAL	SOLE	COMP- LICATED
I. INFECTIVE AND PARASITIC DISEASES								
TUBERCULOSIS OF LUNG /PULMONARY TUBERCULOSIS/								
FY 66	3	2	1	1	1	145	79	66
FY 67	7	7		5	2	303	72	231
FY 68	2	2		2		104	104	
FY 69	6	6		5	1	378	114	264
Total	18	17	1	13	4	930	369	561
TUBERCULOSIS OF GENITOURINARY SYSTEM								
FY 69	1	1			1	265		265
Total	1	1			1	265		265
MUMPS								
FY 66	4	3	1	1	2	40	12	28
FY 67	12	11	1	10	1	131	126	5
FY 68	12	11	1	10	1	129	115	14
FY 69	4	4		4		31	31	
Total	32	29	3	25	4	331	284	47
INFECTIOUS HEPATITIS								
FY 66	5	3	2	3		124	124	
FY 67	3	3		3		145	145	
FY 68	4	4		4		91	91	
FY 69	12	12		10	2	508	385	123
Total	24	22	2	20	2	868	745	123
INFECTIOUS MONONUCLEOSIS /GLANDULAR FEVER/								
FY 66	9	8	1	6	2	138	85	53
FY 67	9	8	1	8		102	102	
FY 68	10	9	1	8	1	150	134	16
FY 69	24	19	5	18	1	248	238	10
Total	52	44	8	40	4	638	559	79
Section Total	127	113	14	98	15	3,032	1,957	1,075
II. NEOPLASMS								
MALIGNANT NEOPLASM OF SALIVARY GLAND								
FY 69	1	1		1		130	130	
Total	1	1		1		130	130	

TABLE II. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUBMARINES FY 66 THROUGH FY 69 INCLUSIVE BY SELECTED DIAGNOSES NAVMED P-5082

SECTION AND DIAGNOSIS BY FISCAL YEAR OF DISCHARGE	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION- AL	SOLE	COMP- LICAT- ED	TOTAL	SOLE	COMP- LICATED
OBESITY, NOT SPECIFIED AS OF ENDOCRINE ORIGIN								
FY 66	7	5	2	2	3	171	50	121
FY 67	5	4	1	1	3	77	33	44
FY 68	5	1	4	1		28	28	
FY 69	4	1	3		1	263		263
Total	21	11	10	4	7	539	111	428
GOUT								
FY 67	3	3		2	1	106	15	91
FY 69	1	1			1	282		282
Total	4	4		2	2	388	15	373
Section Total	54	43	11	27	16	2,362	1,128	1,234
V. MENTAL PSYCHONEUROTIC, AND PERSONALITY DISORDERS								
SCHIZOPHRENIC REACTIONS /DEMENTIA PRECOX/								
FY 66	8	6	2	6		401	401	
FY 67	10	8	2	8		330	330	
FY 68	8	6	2	5	1	364	254	110
FY 69	5	5		5		392	392	
Total	31	25	6	24	1	1,487	1,377	110
MANIC DEPRESSIVE PSYCHOTIC REACTIONS								
FY 66	1	1		1		105	105	
Total	1	1		1		105	105	
ALCOHOLIC PSYCHOSIS								
FY 67	2	2		1	1	159	10	149
FY 68	2	2		2		9	9	
Total	4	4		3	1	168	19	149
ANXIETY REACTION								
FY 66	4	4		4		137	137	
FY 67	5	5		3	2	91	77	14
FY 68	3	3		2	1	96	84	12
FY 69	5	4	1	4		148	148	
Total	17	16	1	13	3	472	446	26

TABLE II. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUB-MARINES FY 66 THROUGH FY 69 INCLUSIVE BY SELECTED DIAGNOSES NAVMED P-5082

SECTION AND DIAGNOSIS BY FISCAL YEAR OF DISCHARGE		INCIDENCE			ADMITTED		S I C K D A Y S		
		TOTAL	AD- MIT- TED	ADDI- TION- AL	SOLE	COMP- LICAT- ED	TOTAL	SOLE	COMP- LICATED
MALIGNANT NEOPLASM OF TESTIS									
	FY 69	3	3		3		217	217	
	Total	3	3		3		217	217	
MALIGNANT NEOPLASM OF BONE									
	FY 69	2	2			2	648		648
	Total	2	2			2	648		648
LYMPHOSARCOMA AND RETICULOSARCOMA									
	FY 69	1	1		1		207	207	
	Total	1	1		1		207	207	
PILONIDAL SINUS /CYST/									
	FY 66	45	42	3	41	1	816	801	15
	FY 67	44	40	4	38	2	895	878	17
	FY 68	36	36		32	4	682	594	88
	FY 69	32	31	1	29	2	578	526	52
	Total	157	149	8	140	9	2,971	2,799	172
BENIGN NEOPLASM OF BONE AND CARTILAGE									
	FY 66	1	1		1		8	8	
	FY 67	2	2		1	1	183	174	9
	FY 68	2	2		2		39	39	
	FY 69	1	1		1		134	134	
	Total	6	6		5	1	364	355	9
Section Total		170	162	8	150	12	4,537	3,708	829
III. ALLERGIC, ENDOCRINE SYSTEM, METABOLIC, AND NUTRITIONAL DISEASES									
THYROTOXICOSIS WITH OR WITHOUT GOITER									
	FY 68	2	2		1	1	238	29	209
	FY 69	2	2		2		72	72	
	Total	4	4		3	1	310	101	209
DIABETES MELLITUS									
	FY 66	6	5	1	5		227	227	
	FY 67	5	5		4	1	295	213	82
	FY 68	5	5		2	3	141	59	82
	FY 69	9	9		7	2	462	402	60
	Total	25	24	1	18	6	1,125	901	224

TABLE II. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUB-MARINES FY 66 THROUGH FY 69 INCLUSIVE BY SELECTED DIAGNOSES NAVMED P-5082

SECTION AND DIAGNOSIS BY FISCAL YEAR OF DISCHARGE	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION AL	SOLE	COMP- LICAT ED	TOTAL	SOLE	COMP- LICATED
DEPRESSIVE REACTION								
FY 66	9	7	2	7		404	404	
FY 67	4	3	1	2	1	124	15	109
FY 68	14	12	2	11	1	454	376	78
FY 69	7	7		3	4	302	108	194
Total	34	29	5	23	6	1,284	903	381
IMMATURE PERSONALITY								
FY 66	16	15	1	13	2	446	432	14
FY 67	19	17	2	16	1	554	488	66
FY 68	14	14		12	2	331	294	37
FY 69	19	15	4	13	2	384	364	20
Total	68	61	7	54	7	1,715	1,578	137
ALCOHOLISM								
FY 66	7	4	3	3	1	113	17	96
FY 67	2	2		2		15	15	
Total	9	6	3	5	1	128	32	96
OTHER, MOSTLY ACUTE SITUATIONAL MALADJUSTMENT								
FY 66	9	9		6	3	173	105	68
FY 67	8	7	1	5	2	264	99	165
FY 68	13	13		12	1	343	342	1
FY 69	13	12	1	11	1	307	275	32
Total	43	41	2	34	7	1,087	821	266
Section Total	207	183	24	157	26	6,446	5,281	1,165
VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS								
EPILEPSY								
FY 66	3	3		2	1	89	68	21
FY 68	2	2		2		31	31	
FY 69	3	3		3		186	186	
Total	8	8		7	1	306	285	21
DEAFNESS, EXCLUDING DEAF MUTISM								
FY 66	2	2		2		45	45	
FY 67	2	2		2		44	44	
FY 68	1	1		1		29	29	
FY 69	7	5	2	5		142	142	
Total	12	10	2	10		260	260	
Section Total	20	18	2	17	1	566	545	21

TABLE II. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUB-MARINES FY 66 THROUGH FY 69 INCLUSIVE BY SELECTED DIAGNOSES NAVMED P-5082

SECTION AND DIAGNOSIS BY FISCAL YEAR OF DISCHARGE	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION AL	SOLE	Comp- LICAT ED	TOTAL	SOLE	COMP- LICATED
VII. DISEASES OF THE CIRCULATORY SYSTEM								
ARTERIOSCLEROTIC HEART DISEASE, INCLUDING CORONARY DISEASE								
FY 66	1	1			1	13		13
FY 67	6	3	3	2	1	206	198	8
FY 68	6	3	3	1	2	256	121	135
FY 69	1	1		1		45	45	
Total	14	8	6	4	4	520	364	156
FUNCTIONAL DISEASE OF HEART								
FY 66	1	1		1		111	111	
FY 67	3	2	1	1	1	8	5	3
FY 69	1	1		1		4	4	
Total	5	4	1	3	1	123	120	3
ESSENTIAL BENIGN VASCULAR HYPERTENSION								
FY 66	14	9	5	8	1	131	110	21
FY 67	12	9	3	8	1	155	127	28
FY 68	8	5	3	4	1	121	103	18
FY 69	9	6	3	4	2	172	114	58
Total	43	29	14	24	5	579	454	125
VARICOSE VEINS OF LOWER EXTREMITIES								
FY 66	2	2		2		23	23	
FY 67	1	1		1		7	7	
FY 68	1	1		1		115	115	
FY 69	3	2	1	2		24	24	
Total	7	6	1	6		169	169	
HEMORRHOIDS								
FY 66	7	7		6	1	132	77	55
FY 67	8	8		8		89	89	
FY 68	12	9	3	6	3	126	47	79
FY 69	5	5		3	2	74	39	35
Total	32	29	3	23	6	421	252	169

TABLE II. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUBMARINES FY 66 THROUGH FY 69 INCLUSIVE BY SELECTED DIAGNOSES NAVMED P-5482

SECTION AND DIAGNOSIS BY FISCAL YEAR OF DISCHARGE	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION AL	SOLE	COMP- LICAT ED	TOTAL	SOLE	COMP- LICATED
PHLEBITIS AND THROMBOPHLEBITIS OF LOWER EXTREMITIES								
FY 66	1							
FY 67	5	4	1	4		136	136	
FY 69	2	2		2		9	9	
Total	8	6	2	6		145	145	
	107	82	27	66	16	1,957	1,504	453
VIII. DISEASES OF THE RESPIRATORY SYSTEM								
LOBAR PNEUMONIA								
FY 66	5	5		5		52	52	
FY 67	8	8		7	1	121	101	20
FY 68	9	9		9		89	89	
FY 69	5	4	1	3	1	29	16	13
Total	27	26	1	24	2	291	258	33
BRONCHOPNEUMONIA								
FY 66	1	1		1		3	3	
FY 67	4	4		2	2	105	18	87
FY 68	2	2		2		9	9	
FY 69	2	2		2		20	20	
Total	9	9		7	2	137	50	87
PRIMARY ATYPICAL PNEUMONIA								
FY 66	4	4		4		27	27	
FY 67	2	2		2		9	9	
FY 68	10	10		9	1	107	96	11
FY 69	4	4		4		39	39	
Total	20	20		19	1	182	171	11
BRONCHITIS, UNQUALIFIED								
FY 66	1	1			1	133		133
FY 67	2	1	1	1		1	1	
FY 68	1		1					
FY 69	5	4	1	4		68	68	
Total	9	6	3	5	1	202	69	133
DEFLECTED NASAL SEPTUM								
FY 66	9	8	1	8		144	144	
FY 67	2	2		2		222	222	
FY 68	7	7		7		80	80	
FY 69	5	5		5		39	39	
Total	23	22	1	22		485	485	

-40-

TABLE II. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUB-MARINES FY 66 THROUGH FY 69 INCLUSIVE BY SELECTED DIAGNOSES NAVMED P-5A82

SECTION AND DIAGNOSIS BY FISCAL YEAR OF DISCHARGE	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION- AL	SOLE	COMP- LICAT- ED	TOTAL	SOLE	COMP- LICATED
EMPHYEMA								
FY 67	1		1					
FY 69	1	1			1	101		101
Total	2	1	1		1	101		101
PLEURISY								
FY 67	4	3	1	3		66	66	
FY 68	4	4		4		151	151	
FY 69	4	3	1	1	2	25	4	21
Total	12	10	2	8	2	242	221	21
SPONTANEOUS PNEUMOTHORAX								
FY 66	4	4		4		44	44	
FY 67	7	6	1	5	1	149	105	44
FY 68	7	7		7		158	158	
FY 69	6	5	1	5		110	110	
Total	24	22	2	21	1	461	417	44
Section Total	126	116	10	106	10	2,101	1,671	430
IX. DISEASES OF THE DIGESTIVE SYSTEM								
ULCER OF STOMACH								
FY 66	1	1		1		27	27	
FY 67	1	1		1		159	159	
FY 68	2	2		2		59	59	
FY 69	4	2	2	1	1	46	36	10
Total	8	6	2	5	1	291	281	10
ULCER OF DUODENUM								
FY 66	7	7		6	1	268	232	36
FY 67	9	8	1	4	4	265	69	196
FY 68	14	10	4	10		321	321	
FY 69	3	3		3		31	31	
Total	33	28	5	23	5	885	653	232
ACUTE APPENDICITIS								
FY 66	15	14	1	14		181	181	
FY 67	25	22	3	20	2	305	225	80
FY 68	20	19	1	16	3	325	233	92
FY 69	25	23	2	21	2	318	298	20
Total	85	78	7	71	7	1,129	937	192

TABLE II. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUBMARINES FY 66 THROUGH FY 69 INCLUSIVE BY SELECTED DIAGNOSES NAVMED P-5082

SECTION AND DIAGNOSIS BY FISCAL YEAR OF DISCHARGE	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION- AL	SOLE	COMP- LICAT- ED	TOTAL	SOLE	COMP- LICATED
HERNIA OF ABDOMINAL CAVITY WITHOUT MENTION OF OBSTRUCTION								
FY 66	36	33	3	25	8	663	435	228
FY 67	29	24	5	20	4	327	242	85
FY 68	36	28	8	25	3	436	397	39
FY 69	30	23	7	19	4	432	353	79
Total	131	108	23	89	19	1,858	1,427	431
CHOLELITHIASIS								
FY 66	2		2					
FY 67	4	4		4		111	111	
FY 68	3	3		2	1	78	33	45
FY 69	1		1					
Total	10	7	3	6	1	189	144	45
Section Total	257	227	40	194	33	4,352	3,442	910
X. DISEASES OF THE GENITOURINARY SYSTEM								
INFECTIONS OF KIDNEY								
FY 66	1	1		1		100	100	
FY 67	1		1					
FY 68	1	1		1		2	2	
FY 69	4	3	1	2	1	52	7	45
Total	7	5	2	4	1	154	109	45
CALCULI OF KIDNEY AND URETER								
FY 66	9	9		7	2	191	136	55
FY 67	13	13		13		142	142	
FY 68	9	8	1	8		116	116	
FY 69	5	3	2	3		31	31	
Total	36	33	3	31	2	480	425	55

TABLE II. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUBMARINES FY 66 THROUGH FY 69 INCLUSIVE BY SELECTED DIAGNOSES NAVMED P-5082

SECTION AND DIAGNOSIS BY FISCAL YEAR OF DISCHARGE	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION- AL	SOLE	COMP- LICAT- ED	TOTAL	SOLE	COMP- LICATED
REDUNDANT PREPUCE AND PHIMOSIS								
FY 66	14	12	2	11	1	138	55	83
FY 67	9	8	1	7	1	44	41	3
FY 68	7	5	2	5		19	19	
FY 69	14	13	1	12	1	47	34	13
Total	44	38	6	35	3	248	149	99
Section Total	87	76	11	70	6	882	683	199
DISEASES OF THE SKIN & CELLULAR TISSUE								
CHRONIC ULCER OF SKIN								
FY 66	1		1					
FY 67	5	3	2	2	1	274	7	267
FY 68	1	1		1		17	17	
Section Total	7	4	3	3	1	291	24	267
XIII. DISEASES OF THE BONES AND ORGANS OF MOVEMENT								
RHEUMATOID ARTHRITIS AND ALLIED CONDITIONS								
FY 66	1	1		1		12	12	
FY 67	3	2	1	1	1	58	53	5
FY 68	2	2		2		405	405	
FY 69	1	1		1		52	52	
Total	7	6	1	5	1	527	522	5
OSTEOARTHRITIS AND ALLIED CONDITIONS								
FY 66	2	2		2		42	42	
FY 67	2	1	1		1	47		47
FY 69	4	2	2	1	1	122	52	70
Total	8	5	3	3	2	211	94	117

TABLE II. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUBMARINES FY 66 THROUGH FY 69 INCLUSIVE BY SELECTED DIAGNOSES NAVMED P-5082

SECTION AND DIAGNOSIS BY FISCAL YEAR OF DISCHARGE	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION AL	SOLE	COMP- LICAT ED	TOTAL	SOLE	COMP- LICATED
OTHER SPECIFIED FORMS OF ARTHRITIS								
FY 66	2	2		1	1	152	12	140
FY 67	4	3	1	2	1	71	53	18
FY 68	4	4		4		270	270	
FY 69	1	1		1		26	26	
Total	11	10	1	8	2	519	361	158
OSTEOMYELITIS AND PERIOSTITIS								
FY 66	2		2					
FY 68	3	3		3		103	103	
FY 69	2		2					
Total	7	3	4	3		103	103	
OSTEOCHONDROSIS								
FY 66	4	4		3	1	64	37	27
FY 67	4	3	1	3		303	303	
FY 68	3	2	1	2		78	78	
FY 69	2	2		2		52	52	
Total	13	11	2	10	1	497	470	27
INTERNAL DERANGEMENT OF KNEE JOINT								
FY 66	5	5		5		157	157	
FY 67	5	3	2	3		116	116	
FY 68	5	5		5		132	132	
FY 69	5	3	2	3		93	93	
Total	20	16	4	16		498	498	
DISPLACEMENT OF INTERVERTEBRAL DISK								
FY 66	12	10	2	9	1	448	376	72
FY 67	10	9	1	8	1	408	394	14
FY 68	12	10	2	10		497	497	
FY 69	11	11		11		663	663	
Total	45	40	5	38	2	2,016	1,930	86
ANKYLOSIS OF JOINT								
FY 66	2	2			2	180		180
FY 67	2	1	1		1	80		80
FY 69	1	1			1	131		131
Total	5	4	1		4	391		391

TABLE II. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUBMARINES FY 66 THROUGH FY 69 INCLUSIVE BY SELECTED DIAGNOSES NAVMED P-5082

SECTION AND DIAGNOSIS BY FISCAL YEAR OF DISCHARGE	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION AL	SOLE	COMP- LICAT ED	TOTAL	SOLE	COMP- LICATED
UPPER GASTROINTESTINAL								
FY 66	1	1			1	125		125
FY 69	1	1			1	24		24
Total	2	2			2	149		149
ABNORMAL URINARY CONSTITUENTS OF UNSPECIFIED CAUSE								
FY 66	5	5		2	3	103	5	98
FY 67	7	7		5	2	88	59	29
FY 68	1		1					
FY 69	2	2		1	1	80	3	77
Total	15	14	1	8	6	271	67	204
HEADACHE								
FY 66	2	2		2		6	6	
FY 67	3	3		3		37	37	
FY 68	5	4	1	2	2	45	25	20
FY 69	3	2	1		2	107		107
Total	13	11	2	7	4	195	68	127
OBSERVATION, WITHOUT NEED FOR FURTHER MEDICAL CARE								
FY 66	20	19	1	17	2	173	155	18
FY 67	19	17	2	15	2	180	164	16
FY 68	24	22	2	18	4	256	215	41
FY 69	14	9	5	8	1	21	19	2
Total	77	67	10	58	9	630	553	77
Section Total	125	110	15	84	26	1,811	1,057	754
XVII. CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE /NATURE OF INJURY/ FRACTURE OF BASE OF SKULL								
FY 66	1	1			1	177		177
FY 67	1		1					
FY 68	1		1					
FY 69	1		1					
Total	4	1	3		1	177		177

TABLE II. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUBMARINES FY 66 THROUGH FY 69 INCLUSIVE BY SELECTED DIAGNOSES NAVMED P-5082

SECTION AND DIAGNOSIS BY FISCAL YEAR OF DISCHARGE	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION AL	SOLE	COMP- LICAT ED	TOTAL	SOLE	COMP- LICATED
SYNOVITIS, BURSITIS, AND TENOSYNOVITIS WITHOUT MENTION OCCUPATIONAL ORIGIN								
FY 66	7	7		6	1	89	73	16
FY 67	7	4	3	3	1	168	56	112
FY 68	5	4	1	4		58	58	
FY 69	9	8	1	7	1	247	183	64
Total	28	23	5	20	3	562	370	192
INFECTIVE MYOSITIS/OTHER INFLAMMATORY DISEASES OF TENDON AND FASCIA								
FY 66	1	1		1		7	7	
FY 68	1	1		1		166	166	
Total	2	2		2		173	173	
HALLUX VALGUS AND VARUS /ACQUIRED/ /CONGENITAL/								
FY 67	1	1			1	10		10
FY 69	2	2		2		115	115	
Total	3	3		2	1	125	115	10
Section Total	148	123	26	107	16	5,622	4,636	986
XIV. CONGENITAL MALFORMATIONS CONGENITAL MALFORMATIONS BONE + JOINT								
FY 66	4	4		3	1	91	71	20
FY 67	3	2	1	2		57	57	
FY 68	3	2	1	1	1	354	49	305
FY 69	4	3	1	1	2	168	57	111
Total	14	11	3	7	4	670	234	436
Section Total	13	11	3	7	4	670	234	436
XVI. SYMPTOMS, SENILITY, AND ILL-DEFINED CONDITIONS NERVOUS SYSTEM AND SPECIAL SENSES								
FY 66	2	2		2		99	99	
FY 67	6	6		3	3	95	59	36
FY 68	2	2		2		5	5	
FY 69	6	5	1	3	2	276	115	161
Total	16	15	1	10	5	475	278	197
OTHER NERVOUS SYSTEM AND SPECIAL SENSES								
FY 66	1	1		1		91	91	
FY 69	1		1					
Total	2	1	1	1		91	91	

TABLE II. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUB-MARINES FY 66 THROUGH FY 69 INCLUSIVE BY SELECTED DIAGNOSES NAVMED P-5082

SECTION AND DIAGNOSIS BY FISCAL YEAR OF DISCHARGE	INCIDENCE			ADMITTED		SICK DAYS		
	TOTAL	AD- MIT- TED	ADDI- TION- AL	SOLE	COM- PLICAT- ED	TOTAL	SOLE	COM- PLICATED
FRACTURE OF FACE BONES								
FY 66	13	8	5	3	5	356	80	276
FY 67	11	6	5	5	1	178	127	51
FY 68	15	9	6	2	7	586	67	519
FY 69	14	10	4	8	2	343	203	140
Total	53	33	20	18	15	1,463	477	986
FRACTURE AND FRACTURE DISLOCATION OF VERTEBRAL COLUMN WITHOUT SPINAL CORD LESION								
FY 66	6	3	3	3		106	106	
FY 67	3	3		2	1	184	183	1
FY 68	7	4	3	1	3	283	7	276
FY 69	7	4	3	1	3	150	83	67
Total	23	14	9	7	7	723	379	344
FRACTURE AND FRACTURE DISLOCATION OF VERTEBRAL COLUMN W/ SPINAL CORD LESION								
FY 69	2	2		2		422	422	
Total	2	2		2		422	422	
FRACTURE OF PELVIS								
FY 67	2		2					
FY 68	4	1	3	1		15	15	
FY 69	3	3		1	2	359	74	285
Total	9	4	5	2	2	374	89	285
FRACTURE OF HUMERUS								
FY 66	2	2		2		112	112	
FY 68	2	2		1	1	143	56	87
FY 69	1	1			1	28		28
Total	5	5		3	2	283	168	115
FRACTURE OF RADIUS AND ULNA								
FY 66	5	3	2	2	1	203	69	134
FY 67	5	3	2	3		165	165	
FY 68	7	6	1	5	1	158	144	14
FY 69	6	4	2	1	3	87	3	84
Total	23	16	7	11	5	613	381	232
FRACTURE OF CARPAL BONE/S/								
FY 66	1		1					
FY 69	3	2	1	1	1	351	340	11
Total	4	2	2	1	1	351	340	11

TABLE II. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUBMARINES FY 66 THROUGH FY 69 INCLUSIVE BY SELECTED DIAGNOSES NAVMED P-5082

SECTION AND DIAGNOSIS BY FISCAL YEAR OF DISCHARGE	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION AL	SOLE	COMP- LICAT ED	TOTAL	SOLE	COMP- LICATED
FRACTURE OF NECK OF FEMUR								
FY 68	3	1	2		1	128		128
Total	3	1	2		1	128		128
FRACTURE OF OTHER AND UNSPECIFIED PARTS OF FEMUR								
FY 66	1	1			1	173		173
FY 67	1		1					
FY 68	5	1	4		1	267		267
FY 69	7	3	4	3		140	140	
Total	14	5	9	3	2	580	140	440
FRACTURE OF TIBIA AND FIBULA								
FY 66	7	7		6	1	118	75	43
FY 67	8	4	4	3	1	303	301	2
FY 68	11	8	3	6	2	635	588	47
FY 69	12	8	4	5	3	747	261	486
Total	38	27	11	20	7	1,803	1,225	578
FRACTURE OF ANKLE								
FY 66	3	3		3		352	352	
FY 67	5	5		3	2	530	182	348
FY 68	4	2	2	1	1	18	10	8
FY 69	8	4	4	4		248	248	
Total	20	14	6	11	3	1,148	792	356
FRACTURE OF ONE OR MORE TARSAL AND METATARSAL BONES								
FY 66	3	3		3		115	115	
FY 67	7	7		7		172	172	
FY 68	5	3	2	2	1	103	55	48
FY 69	4	1	3		1	139		139
Total	19	14	5	12	2	529	342	187
MULTIPLE FRACTURES INVOLVING BOTH LOWER LIMBS, LOWER WITH UPPER LIMB, AND LOWER LIMB/S/ WITH RIB/S/ AND STERNUM								
FY 66	1	1		1		251	251	
Total	1	1		1		251	251	

TABLE II. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUB-MARINES FY 66 THROUGH FY 69 INCLUSIVE BY SELECTED DIAGNOSES NAVMED P-5082

SECTION AND DIAGNOSIS BY FISCAL YEAR OF DISCHARGE	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION AL	SOLE	COMP- LICAT ED	TOTAL	SOLE	COMP- LICATED
DISLOCATION OF KNEE								
FY 66	9	9		8	1	299	209	90
FY 67	7	7		6	1	305	246	59
FY 68	11	10	1	10		308	308	
FY 69	10	9	1	8	1	147	132	15
Total	37	35	2	32	3	1,059	895	164
SPRAINS AND STRAINS OF KNEE AND LEG								
FY 66	1		1					
FY 67	12	10	2	9	1	232	152	80
FY 68	7	5	2	2	3	295	38	257
FY 69	3	3		2	1	90	25	65
Total	23	18	5	13	5	617	215	402
SPRAINS AND STRAINS OF ANKLE AND FOOT								
FY 66	4	4		3	1	80	65	15
FY 67	10	7	3	7		117	117	
FY 68	5	4	1	2	2	78	3	75
FY 69	3	1	2		1	7		7
Total	22	16	6	12	4	282	185	97
SPRAINS AND STRAINS OF BACK EXCLUDING SACROILIAC REGION								
FY 66	17	16	1	16		159	159	
FY 67	22	20	2	20		238	238	
FY 68	11	10	1	9	1	83	54	29
FY 69	8	8		8		132	132	
Total	58	54	4	53	1	612	583	29
CONCUSSION /COMMOTION/ OF BRAIN								
FY 66	23	11	12	7	4	160	68	92
FY 67	14	8	6	5	3	61	54	7
FY 68	22	12	10	2	10	234	10	224
FY 69	15	7	8	3	4	41	26	15
Total	74	38	36	17	21	496	158	338
OPEN WOUND OF EYE AND ORBIT								
FY 66	5	2	3		2	92		92
FY 67	10	6	4	3	3	155	25	130
FY 69	2	2		1	1	4	2	2
Total	17	10	7	4	6	251	27	224

TABLE II. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUB-MARINES FY 66 THROUGH FY 69 INCLUSIVE BY SELECTED DIAGNOSES NAVMED P-5082

SECTION AND DIAGNOSIS BY FISCAL YEAR OF DISCHARGE	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION AL	SOLE	COMP- LICAT ED	TOTAL	SOLE	COMP- LICATED
FACE, EXCLUDING EYE AND EAR								
FY 66	6	3	3	2	1	25	24	1
FY 67	12	6	6	2	4	96	24	72
FY 68	18	10	8	3	7	143	10	133
FY 69	12	5	7	1	4	58	3	55
Total	48	24	24	8	16	322	61	261
OPEN WOUND OF ELBOW AND FOREARM, AND OF WRIST NOT INVOLVING TENDONS								
FY 66	1	1			1	95		95
FY 67	3	2	1	2		36	36	
FY 68	3	2	1	2		71	71	
FY 69	4	2	2	2		323	323	
Total	11	7	4	6	1	525	430	95
OPEN WOUND OF FINGER/S/								
FY 66	4	3	1	3		48	48	
FY 67	4	4		3	1	105	81	24
FY 69	7	5	2	4	1	114	66	48
Total	15	12	3	10	2	267	195	72
TRAUMATIC AMPUTATION OF FINGERS								
FY 66	4	4		4		45	45	
FY 67	5	4	1	4		120	120	
FY 68	2	1	1	1		15	15	
FY 69	4	3	1	3		61	61	
Total	15	12	3	12		241	241	
OPEN WOUND OF KNEE AND LFG /EXCEPT THIGH AND OF ANKLE NOT INVOLVING TENDONS								
FY 66	2	2		2		18	18	
FY 67	6	5	1	2	3	121	20	101
FY 68	8	4	4	4		22	22	
FY 69	7	4	3	3	1	178	28	150
Total	23	15	8	11	4	339	88	251
Section Total	561	380	181	269	111	13,856	8,084	5,772

TABLE II. ADMISSIONS TO THE SICK LIST AND SICK DAYS AMONG PERSONNEL ATTACHED TO NUCLEAR POWERED SUB-MARINES FY 66 THROUGH FY 69 INCLUSIVE BY SELECTED DIAGNOSES NAVMED P-5082

SECTION AND DIAGNOSIS BY FISCAL YEAR OF DISCHARGE	INCIDENCE			ADMITTED		S I C K D A Y S		
	TOTAL	AD- MIT- TED	ADDI- TION AL	SOLE	COMP- LICAT ED	TOTAL	SOLE	COMP- LICATED
XVIII. SUPPLEMENTARY CLASSIFICATIONS FOR SPECIAL CASES								
SKIN IMMUNITY AND SENSITIZATION TEST /WITHOUT COMPLAINT OR SICKNESS/								
FY 66	88	83	5	83		602	602	
FY 67	141	126	15	123	3	1,275	1,250	25
FY 68	4	1	3	1		15	15	
FY 69	8	5	3	5		133	133	
Total	241	215	26	212	3	2,025	2,000	25
FOLLOW UP EXAMINATIONS								
FY 66	9	5	4	5		349	349	
FY 67	10	7	3	7		527	527	
FY 68	6	4	2	4		161	161	
FY 69	9	4	5	4		13	13	
Total	34	20	14	20		1,050	1,050	
Section Total	274	235	40	232	3	3,075	3,050	25

APPENDIX B

APPENDIX B: Table I. Admission Rates, All Causes,* Worldwide, Navy and Marine Corps:
March 1961 — March 1962 ***

(Rates on annual basis per 1,000 strength)

NAVAL DISTRICT, AREA, AND SHIP	1961										1962		
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Ships	166.1	141.0	147.0	146.4	148.0	151.7	138.0	148.1	136.7	120.9	154.5	140.2	137.3
Atlantic Fleet	148.1	132.0	133.7	142.4	149.9	150.7	131.4	141.9	126.9	117.8	153.2	132.2	138.5
Aircraft carriers.	170.6	131.5	153.1	185.6	212.2	212.9	182.7	190.3	172.6	167.8	217.3	177.7	186.0
Cruisers	193.2	158.0	184.2	162.4	195.2	170.5	142.8	140.8	175.0	134.2	176.2	141.2	163.1
Destroyers	96.8	92.7	94.0	100.4	100.4	91.1	77.2	100.3	72.5	69.1	114.6	72.2	84.0
Submarines	56.5	64.1	36.9	54.1	41.7	37.0	51.7	62.5	27.4	38.0	39.0	43.7	41.7
Tenders (AD & AS)	275.4	266.2	246.1	244.3	190.9	222.1	238.2	242.5	216.0	202.1	265.6	231.7	275.4
All other	140.3	133.0	121.7	124.0	132.3	142.6	120.5	125.6	114.0	105.3	118.3	124.3	119.5
Pacific Fleet.	186.5	152.3	160.6	150.4	146.3	153.0	144.2	155.8	147.4	125.6	156.8	150.5	137.8
Aircraft carriers.	228.4	189.8	183.4	196.3	188.3	218.7	181.0	186.8	174.6	155.6	198.8	162.6	173.5
Cruisers	113.6	121.4	174.6	128.0	108.8	129.0	150.5	126.6	160.9	79.5	147.2	142.4	109.1
Destroyers	120.7	102.1	101.8	86.3	79.8	85.0	86.8	108.8	96.5	79.2	92.0	80.4	44.3
Submarines	32.9	53.4	62.8	46.7	47.6	74.7	64.2	76.7	76.4	31.7	68.7	54.0	61.4
Tenders (AD & AS)	428.4	184.6	198.1	166.8	156.6	135.6	161.3	159.3	137.3	191.6	147.6	175.8	211.2
All other	191.3	164.3	179.6	168.9	169.4	164.6	159.6	172.6	163.5	139.3	175.6	185.1	163.2
MSTS	118.1	65.9	157.9	169.4	134.6	143.8	163.7	89.4	119.2	60.2	115.8	55.9	77.8
Atlantic	21.6	89.9	44.8	144.8	31.4	152.4	54.8	48.4	275.3	0	177.2	80.2	152.9
Pacific	158.5	59.1	192.6	175.0	151.8	142.8	178.8	93.4	84.9	68.6	101.4	51.9	69.7

* Includes admissions to the sicklist only—does not include cases treated on an outpatient basis.

/ Includes other Pacific areas not shown in breakdown.

*** From: Statistics of Navy Medicine, 18(I), March, 1962, Table 10, Page 44.

Source: NAVMED-1390, Morbidity Report.

APPENDIX B: Table II. Admission Rates and Rates for Outpatient New Cases per 1,000
Strength (Annual Basis), Selected Causes, By Area,
Navy and Marine Corps: December 1961***

AREA	ACUTE RESPIRATORY INFECTIONS RATE [/]			ACUTE DIARRHEAL CONDITIONS RATE			VENERAL DISEASE RATE			ACUTE NONGONOCOCCIC URETHRITIS RATE		
	Total	Ad- mis- sion	Out- patient	Total	Ad- mis- sion	Out- patient	Total	Ad- mis- sion [≠]	Out- patient	Total	Ad- mis- sion [≠]	Out- patient
Ships	876.1	20.1	856.0	77.0	2.5	74.5	50.8	1.9	48.9	35.7	0.2	35.5
Atlantic Fleet	870.9	17.3	853.6	83.3	1.8	81.5	37.8	2.0	35.8	19.8	0.3	19.5
Aircraft carriers	741.2	35.6	705.6	95.9	3.2	92.7	38.4	1.0	37.4	21.2	0	21.2
Cruisers	796.2	20.6	775.6	68.8	0	68.8	32.1	5.7	26.4	6.9	0	6.9
Destroyers	957.1	2.8	954.3	103.2	0.4	102.8	43.9	2.1	41.8	20.7	0	20.7
Submarines	1,113.5	0	1,113.5	45.9	0	45.9	3.2	0	3.2	7.9	0	7.9
Tenders (AD & AS)	1,041.1	41.4	999.7	124.3	7.1	117.2	32.3	1.0	31.3	32.3	0	32.3
All other	837.4	10.9	826.5	59.2	1.2	58.0	40.9	2.2	38.7	19.7	1.0	18.7
Pacific Fleet	896.3	22.7	873.6	72.0	3.3	68.7	65.3	2.0	63.3	53.0	0.1	52.9
Aircraft carriers	637.2	38.8	598.4	63.4	4.8	58.6	37.3	0	37.3	55.6	0	55.6
Cruisers	521.8	12.0	509.8	158.9	1.7	157.2	46.6	0	46.6	15.5	0	15.5
Destroyers	1,266.3	5.4	1,260.9	69.5	0.8	68.7	62.4	1.2	61.2	32.2	0	32.2
Submarines	1,152.8	0	1,152.8	90.2	0	90.2	34.1	0	34.1	31.7	0	31.7
Tenders (AD & AS)	637.9	71.3	566.6	63.2	16.3	46.9	22.4	0	22.4	22.4	0	22.4
All other	906.9	20.6	886.3	66.6	2.8	63.8	92.8	4.1	88.7	72.0	0.2	71.8
MSTS	225.0	32.1	192.9	0	0	0	40.2	0	40.2	40.2	0	40.2
Atlantic	32.9	0	32.9	0	0	0	98.7	0	98.7	0	0	0
Pacific	251.7	36.6	215.1	0	0	0	32.0	0	32.0	45.8	0	45.8

[/] Includes acute upper respiratory infections, influenza, and pneumonia.

[≠] Includes admissions to the sicklist only.

*** From: Statistics of Navy Medicine, 18(1), March 1962, Table 13, Page 23.

Source: NAVMED-1390, Morbidity Report.

UNCLASSIFIED

Security Classification

DOCUMENT CONTROL DATA - R & D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author)		2a. REPORT SECURITY CLASSIFICATION	
Naval Submarine Medical Research Laboratory Naval Submarine Medical Center		Unclassified	
3. REPORT TITLE		2b. GROUP	
PROVISIONAL MEDICAL STATISTICS FOR PERSONNEL ATTACHED TO NUCLEAR POWERED SUBMARINES: FY '66 - '69			
4. DESCRIPTIVE NOTES (Type of report and inclusive dates)			
Interim report			
5. AUTHOR(S) (First name, middle initial, last name)			
Ruport HESTER, Ph. D.			
6. REPORT DATE	7a. TOTAL NO. OF PAGES	7b. NO. OF REFS	
27 July 1971	54	7	
8a. CONTRACT OR GRANT NO.	9a. ORIGINATOR'S REPORT NUMBER(S)		
b. PROJECT NO. M4306.01-4020BFK9	NSMRL Report Number 674		
c.	9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)		
d.			
10. DISTRIBUTION STATEMENT			
Each transmittal of this document outside the Department of Defense must have prior approval of the Officer-in-Charge, Naval Submarine Medical Research Laboratory.			
11. SUPPLEMENTARY NOTES		12. SPONSORING MILITARY ACTIVITY	
		Naval Submarine Medical Center Box 600 Naval Submarine Base Groton, Connecticut 06340	
13. ABSTRACT			
A statistical summary of admissions to the sick list and deaths among personnel attached to nuclear powered submarines during fiscal years 1966 - 1969 inclusive is reported. Data were obtained by search of Navy Bureau of Medicine and Surgery ADP tape files; and in view of the file search procedure, certain admissions to the sick list, notably admissions to non-Naval medical facilities, are missing. Compared to Navy and Marine Corps service-wide experience for corresponding years, the hospitalization rates for the submariners were very low; and in general, preliminary findings were negative. Possible implications of these data with respect to prolonged exposure to the nuclear powered submarine environment upon crew health are explored.			

UNCLASSIFIED

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Security Classification

14.

KEY WORDS

LINK A

LINK B

LINK C

ROLE

WT

ROLE

WT

[illegible]

WT

Mortality

UNCLASSIFIED
Security Classification



